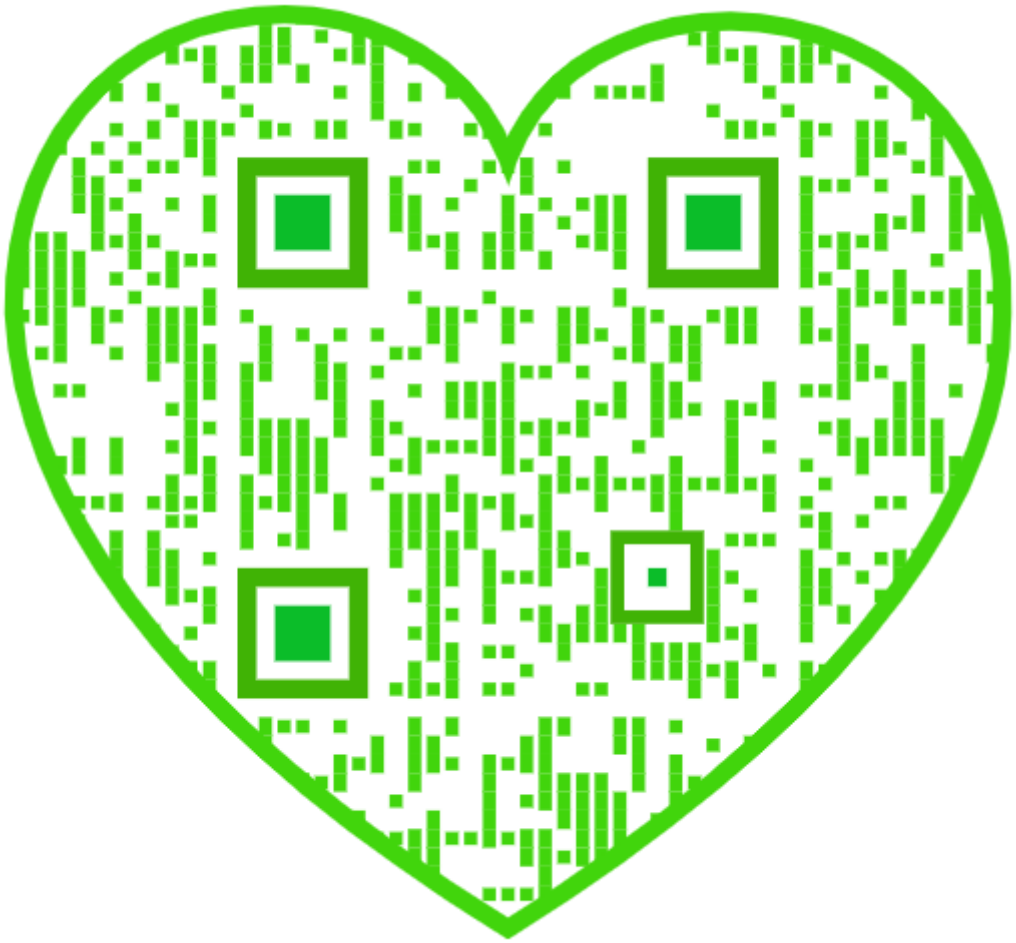

MR. EDWIN BENNETT, BALTIMORE

The oldest potter in America

The ENCYCLOPEDIA OF CERAMICS

Compiled by W. P. JERVIS

WITH MUCH ORIGINAL MATTER NOW FIRST PUBLISHED

AT THE MOUTH OF THE KILN

A flash-light photograph of MR. T. A. BROUWER, JR.

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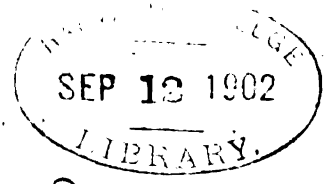

Sumner Fund.

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PREFACE

ORIGINALLY written for and published in the CROCKERY AND GLASS JOURNAL, the whole of this work has now been thoroughly revised and much new information added including the series of Marks and Monograms. Intended for English-speaking readers, in the bibliographical list I have omitted nearly all foreign books, and to this list the reader in search of further information is referred, for I am conscious that within the scope of this work no subject has been exhaustively treated. As the work is not intended as a directory, I have refrained from inserting the names of some hundreds of firms, whose names are known to me, but who only make wares of a strictly commercial character, some bad, some good, and which would be of no interest to the general reader.

W. P. JERVIS.

The Encyclopedia of Ceramics.

A

AALMES, or Aalmis, a painter on faïence born at Rotterdam, who for a long time worked for Cornelis de Berg, of Delft. Pieces bearing his name, together with the mark of Cornelis de Berg, are dated 1731, and consist of figure subjects, often in blue, but occasionally in polychrome.

ABAQUESNE, MASSEOT, a faïence manufacturer of Rouen, A. D. 1535-57. He was the maker of the remarkable paving in the *Château de Ecouen*, which has been attributed both to Luca della Robbia and Palissy. He also made a large number of pharmacy jars. The name Masseot, Massiot or Masse was often employed in the sixteenth century as the diminutive of Thomas.

FRANK P. ABBOT.

ABBEY, RICHARD, the founder of the Herculaneum Pottery, Liverpool, A. D. 1790. (See Herculaneum.)

ABBOT, FRANK P., commenced his business career with Churchman & England in 1868. In 1870 he became associated with Chas. Field Haviland & Co., and remained with their successor, O. A. Gager, from 1881 to 1886. He then became a partner in the firm of O. A. Gager & Co., retaining that parnership until 1892, when he entered the newly-constructed firm of Haviland & Abbot. He is now a member of the firm of Gerard, Dufrarsseix & Abbot. Mr. Abbot was president of the Crockery Board of Trade, New York, in 1892.

ABE OMI, a Japanese potter of the present day, with a kiln at Kanazawa, Kaga.

ABINGDON, J. L., partner with E. J. Ridgway from 1864 to 1866. (See Ridgway, W.)

ABO, a Chinese potter of the Middle Ages, who manufactured ware coated with a bluish glaze, and called from him "Abo glaze."

ABRAHAM, R. F., art director at Copelands, Stoke-upon-Trent. He was educated at Antwerp and Paris, and was a follower of the Etty school. He was for some time at the Coalport Works, and left there to assume the directorship of the Copeland factory, a position

R. F. ABRAHAM.

he filled with credit to himself and honor to the firm until his death in 1896.

ABRAHAM, ROBERT, son of the above. A skilful figure painter, his underglaze pieces being marked with much originality and vigorous coloring.

ABSOLON, Yarmouth, England. The Absolons were china dealers of Yarmouth at the end of the eighteenth century, and one of them erected a kiln called "The Ovens." He was a decorator only, and painted mostly flowers in the style of Swinton, Don, etc. M 1.

ACOLE, GIOVANNI, a potter of Faenza, Italy. Sixteenth century.

ACTIEN-GESELLSCHAFT, Norddeutsche Steingutfabrik, Grohn. Established 1870. M 2.

ADAM, director of the Vincennes factory up to A. D. 1753.

ADAMS, HARVEY, Longton, Staffordshire. The Sutherland Road Works were started by Adams, Scrivener & Co. in 1862. Later, Titus Hammersley took the place of Mr. Scrivener, who retired, and the style of the firm became Harvey Adams & Co. China of the cheaper grade was at first made, but the body was gradually improved and a higher style of decoration aimed at. The firm introduced many specialties, among which were tea and dessert services formed of groups of ferns and leaves copied from nature and colored naturally. Silver was also artistically introduced. Mr. Adams was a man of great enterprise, and succeeded in engaging Mr. Henry Mitchell, an animal painter, whose work was well known and appreciated. He had also the advantage of the artistic training and experience of Mr. Slater as art manager. Joseph Longmore, a bird-painter, also contributed to the success of the firm.

ADAMS, JOHN, Brick House Works, Burslem. The first brick house erected in Burslem was built by John Adams about the year 1657, and the adjacent potworks founded about the same time became known as the Brick House Works. They were afterwards carried on by Ralph Adams (about A. D. 1717), and he was succeeded by his son John, who died in 1757. His son and heir, William Adams, being only seven years old, the works were leased to Josiah Wedgwood from 1760 to 1772 or 1773, prior to his removal to Etruria. William Adams married Mary, daughter of John Bourne, April 30, 1769, and from 1773 he worked the Brick House Works for some years. Although they were of fair size for their time, they were eventually sold, and he built a larger pottery at Cobridge, the style of the firm being William Adams & Co. In 1789 they were making cream color, blue painted and enameled ware. William Adams died in 1831 at Cobridge Hall. His sons, one of whom was named John, carried on the works from 1831 to 1847, when the family became extinct, neither the sons nor daughters having issue. It may be noted that the Brick House Works was also known as the Bell Works, a workman's sobriquet, probably given because the first bell and cupola was erected on the roof by Wedgwood during his occupancy, for the purpose of calling the workmen together.

ADAMS, WILLIAM, a friend and pupil of Wedgwood and cousin of William Adams of the Brick House, established a works at Tunstall in 1789, called the Greengates Pottery. He made jasper, black basaltes, cream color, etc., and is mentioned by Miss Meteyard

as being one of Wedgwood's competitors. The Jermyn Street Museum has some good specimens of his work. He died in 1805, when the works were for a time carried on by a trustee for his son Benjamin; but the quality of the ware deteriorated, and Benjamin sold the works in 1820 to a Mr. Meir, of Tunstall. The family is now extinct.

ADAMS, RICHARD (born 1739, died 1811), commenced manufacturing at Cobridge in 1759 and made white stone ware and salt-glaze earthenware. He was cousin to the Brick House Adams and a distant cousin to William Adams of Greengates. Shaw, in his "Chemistry of Pottery," says that, among others, Adams of Holden Lane was glazing with salt and a small quantity of litharge: but as this antedates the coming of the Elers by about ten years, we are doubtful about accepting it as correct, the honor seeming clearly to belong to the Elers. The Adams Shaw refers to was great-grandfather of Richard Adams above named.

ADAMS, WILLIAM, Stoke-upon-Trent. William Adams (1) of Fenton Hall, only son of the above, was born in 1772. In addition to the interest he had in his father's pottery at Cobridge, he had an interest in the Hadderidge Pottery, Burslem, which belonged to his father-in-law, Louis Heath. This pottery came into the possession of the Adams in 1839, but they sold it in 1890, having let it for a time to John Wedgwood and others. About 1793 the Cobridge Works were given up, and William Adams came to Stoke in 1804. He made a general line of earthenware, and at a later date Parian statuettes, vases, etc. In 1820 his eldest son, also named William (2), was taken into partnership, but he retired about the time of his father's death, 1829, and the several works (there were five separate potteries carried on by them at Stoke) were continued by his younger brothers, who gave up the business in 1853. William Adams (2) from 1825 to 1834 was managing the Liverpool shipping office belonging to the Stoke firm, but having acquired the Greenfield Pottery, Tunstall, in 1827, he began operations there in 1834. He died at Greenfield in 1865, his son William (3) continuing the business with his brother Thomas. They also worked the Greengates Pottery, before mentioned. Greenfield was formerly called Smithfield, after its founder, Theophilus Smith, but about 1798 the estate and works became the property of his kinsman Breeze, and the name was then changed to Greenfield. It passed into the hands of William Adams (2), through his marriage with a daughter of the second Breeze of Greenfield, in 1827. The old ledgers of Jesse Breeze are still in existence, and show that he shipped largely to the United

States. At the Greenfield and Greengates potteries they have yet a few engravings brought out at the Stoke Works, and still print a pattern engraved at Stoke about 1818. The present style of the firm is William Adams & Co. M 3.

ADAMS & BROMLEY, Shelton, Staffordshire, manufacturers of jasper and majolica, succeeded John Adams & Co. in 1873.

ADDERLEY, J. F., Longton (formerly Morris & Davis), china manufacturers. M 4.

ADDERLEY, WILLIAM, Longton, makes both china and earthenware. His usual trademark is a ship in full sail. M 5.

ADLERFELDT, BARON PIERRE. The factory at Rorstrand, Sweden, was established under his patronage A. D. 1727.

AGATE WARE, Staffordshire. Early part of the eighteenth century. Agate was produced by using two natural clays, layers of various thicknesses being laid upon one another, and the cross slices cut off with a wire. The pieces thus obtained were pressed in molds, and afterwards glazed with lead ore. Wedgwood considerably improved on the early wares, using the colored clay in bands, twists, stripes and waves, recalling the appearance of, without exactly imitating, many beautiful agates and marbles. He also produced much the same effect by surface decoration.

AGATSU-MURA, Japan. Kato-Shirozayemon (which see) was a potter here before his visit to China in A. D. 1223.

AGOSTINO, DI ANTONIO DI DUCCIO, pupil of Luca della Robbia. He displayed great talent, and went to Perugia in 1461, exercising considerable influence on the Deruta school.

AIGUIERE (Italian), a ewer-shaped vase. Made originally at Faenza and Urbino, and later extensively copied by French and Dutch potters.

AIRE (France). Manufacture of faïence; founded in 1730, and in existence until 1790. The decorations were generally bouquets of flowers, in which, as is usual with faïence in the south of France, violet predominated.

AJAIB EL BOLDAN, a work written in the thirteenth century by Kazi Imad-ed-Din Kazvini, who died A. D. 1283, and giving much curious information respecting the potter's art in Persia. "But especially is Ispahan famed for the skill of her potters, who make vases that can hold four pints of water, and which weigh no more than four miscals (12½ dwt)."

AKAHADA WARE, Japan. This ware is from a kiln at Koriyama, Province of Yamato, and dates from A. D. 1644. The product has the general appearance of Hagi-yaki. The manufacture was originally

confined to tea utensils only, but at the present has been greatly extended.

AHRENFELDT, CHARLES, born at Luebeck, Germany, December 10, 1807; died at Dresden in 1893. In 1884 he established a decorating business in Limoges, and two years afterwards commenced the manufacture of china there. He had also control of a china manufactory at Carlsbad-Altrohlau, which he started in 1886. His son, Charles J. Ahrenfeldt, born 1858, succeeded to the business. The china manufactured at Limoges is of very fine quality, of a close, even texture, a good color and great translucency. M 6.

AKA-YE, a factory in Owari, Japan, where reproductions of Chinese porcelain have been made since 1810.

AKIYAMI TEIJI, a skilful decorator of Nagoya, Province of Owari, Japan.

ALBANY SLIP, a natural glaze found in the bed of the Hudson River near Albany. It is of a rich deep brown, very brilliant, and of a velvety luster. It is largely used as a coating for drain-pipes, etc., rendering them impervious to acids. It is also used as a sort of pyrometer or test to indicate the degree of heat in a burning kiln.

ALBASTROS (Greek), a diminutive oil jar with two small ears by which to suspend it.

ALBISSOLA, a village near Savona, Italy, where the faïence works generally known as Savona were established. Dominique Conrade, who introduced the art into Nevers (France), was originally of Albissola.

ALCOCK & DIGGORY, Burslem. In 1867 they commenced business as china manufacturers in a part of the Hill Top Works. In 1870 they were succeeded by Bodley & Diggory; in 1871 it was E. F. Bodley; 1875, Bodley & Son, who were succeeded by E. J. D. Bodley.

ALCOCK, HENRY, & Co., Cobridge, Staffordshire, manufacturers of semi-porcelain. The elegance of their designs and their careful execution has rendered a mechanical process artistic. They are the successors of John Alcock. M 7.

ALCOCK, J. & G., Cobridge, Staffordshire. Established 1843, and catered principally to the American market. M 8.

ALCOCK, RICHARD, Burslem, Staffordshire. He succeeded Burgess & Leigh, earthenware manufacturers, and was in turn succeeded by A. J. Wilkinson.

ALCOCK, SAMUEL, figure painter at Copelands, Stoke-upon-Trent. His subjects are most carefully drawn and painted, with a delicacy as charming as they are original.

ALCOCK, S., & Co., Hill Top Pottery, Burslem, established in 1839, the works having been previously worked by Ralph Wood. In 1866 they passed into the hands of the Hill Top Pottery Company, which liquidated in 1867. The china part of the works was taken by Alcock & Diggory, and the earthenware part by Burgess, Leigh & Co.

DECORATION ON ALCORA WARE.

ALCORA, near Valencia, Spain. Workmen from Moustiers founded a faïence manufactory here in 1727. The productions are mostly identical with those of Moustiers. M 9.

ALDERS, THOMAS, a potter at Cliff Bank, Stoke-upon-Trent. He and his partner, John Harrison, were Wedgwood's first partners.

ALHAMBRA VASE.

ALENCON (France), the site of Count de Brancas Lauraguais' discovery of an inferior quality of kaolin in 1727.

ALER VALE POTTERY, Newton Abbot, Devon. Pottery made of the fine red clay of the locality and covered with an engobe of white or a warm orange color, this being often incised with mottoes and pithy sayings admirably chosen. A small cream painted-in slip with a rooster has for a motto "Stracht fra the coo." Another one has: "Success comes not by wishing, but hard work bravely done." The pieces are usually small, quaint and well designed.

ALHAMBRA VASE, a vase four feet three inches high and seven feet in circumference — a fine example of the Hispano-Moresque period (see Hispano-Moresque). It is made of earthenware and

decorated in a golden yellow luster and blue. It, with two others, was found in the sixteenth century under the pavement of the palace of Mohammed-ben-Alhamar, the first Moorish king of Granada. It is justly considered as a masterpiece of Moorish art. The form of the characters in the inscriptions fairly assign its date of manufacture to the middle of the fourteenth century, though some writers have placed it as early as 1320. It was copied at Sèvres, and later in faïence by Deck, of Paris. The latter was purchased for the South Kensington Museum. It has also been reproduced by Gomez, of Triana, near Seville.

ALLEN, THOMAS, an artist on pottery, whose education, begun at the Stoke School of Art, was continued at South Kensington, for which building he executed the large friezes and dome pieces so well known and justly admired. Until ten or twelve years ago he was in the Minton studios, where he produced much excellent work, his contributions to the various exhibitions always forming an attractive and prominent part of the Minton display. Messrs. Wedgwood were fortunate enough to secure his services as art director—a position we trust he will be spared to occupy for many years.

ALLEN, T. G., son of Dr. Allen, Bishop of Ely. He discovered the fine bed of plastic clay which from his appreciation of the find resulted in the establishment of the Torquay Terra Cotta Works.

ALLEN, W. B., secretary and treasurer of the Mercer Pottery Company, Trenton, N. J.

ALLERTON, CHAS., & SONS, Longton, Staffordshire, manufacturers of china and luster ware. M 10.

ALLOA. These works were established in 1790 by James Anderson, and were afterwards carried on by William Gardner. In 1855 they were purchased by the present proprietors, W. & J. Bailey. The products are rockingham, majolica and jet.

ALLUAUD FAMILY. François Alluaud was elected mayor of Limoges August 27, 1792. François Alluaud, son of above, was also elected mayor of Limoges August 18, 1830, and again in 1832. Resigned the office in September, 1833. He was made Chevalier of the Legion of Honor July 21, 1832. M. Alluaud, the elder, was Representative in the General Assembly, and his name appears among those as present at the meeting of March 16, 1789, the title then given him being "Director of the Royal Porcelain Factory at Limoges," at that time under the control of the Royal Sèvres Factory (1789-1793). He is also included among the list of authors of the eighteenth century, his works having been published in 1765, 1768

and 1769. The son also published several books on mineralogy, porcelain and agriculture between the years 1810 and 1855. M. Alluaud is referred to in the history of commerce and industry of Limoges as being mainly instrumental in obtaining from Louis Philippe a pension for Madame Darnay, the widow of Dr. Darnay, the discoverer of the kaolin mines at St. Yrieix, about the year 1765. The Alluaud family to this day own the most important of the clay mines at St. Yrieix. M. Alluaud is referred to in a work entitled "Limoges et le Limousin" as follows: "M. Alluaud, the father, founded a porcelain factory in 1798. The owner of important clay mines, his first experiments were with the clays and kaolin that he shipped to the other manufacturers. He died, justly regretted by his fellow-citizens, in 1799, and his eldest son, M. François Alluaud, continued his father's experiments, and speedily brought them to

ALLUAUD WARE, MADE IN 1815.

perfection in all the branches. In the French Industrial Exhibition of 1806 he received honorable mention, which was but the first of many well-merited distinctions." During the visit of Prince Napoleon to Limoges in 1858 he visited the factory of M. Alluaud on the 12th of July, on which occasion M. Alluaud was decorated with the "Rosette d'officier," in the Legion of Honor. The Alluaud factory, which is known as the "Casseaux" Works, continued under the active management of the Alluauds until 1876, when Mr. Charles Field Haviland assumed control, his wife being a granddaughter of M. Alluaud. Mr. Haviland continued in control and management until 1881, when he retired from active business, and was succeeded by E. Gerard, Dufraisseix & Morel, afterward changed to E. Gerard, Dufraisseix & Abbot, who are now in control of the factory. The pieces illustrated were made by the Alluauds about seventy to eighty

years ago. They were found in a loft where repairs and enlargement were being made. The style is pure Empire. They are very interesting as examples of underglaze or "furnace fire" colors made at so early a date. A number of other pieces found at the same time are white, of quaint design, and have almost the appearance of "pate tendre."

ALONCLE, a painter of birds and animals at Sèvres during its first period, 1753-1800.

ALPAUGH & MAGOWAN, Trenton, N. J. Established in 1863. Manufacturers of earthenware. They succeeded Coxon & Thompson. In 1883 the firm was merged in the Trenton Pottery Company.

ALPHONSO I. about 1504 caused experiments to be made which resulted in the production of *bianco allatato*, or milky-white glaze. Alphonso II., who continued the experiments, succeeded about 1567, according to a letter from the Florentine ambassador at Ferrara, in producing porcelain. No specimens, however, have been found, while that of Florence is well known.

ALSOP, WM., proprietor of a pottery at Plymouth, England, making common white earthenware and blue printed. It was closed in 1863. The mark was the royal arms and P. P. COY. L. (Plymouth Pottery Co. Ld.) STONE CHINA.

ALUMINA, one of the earths, consisting of the metal aluminum and oxygen. It is the characterizing ingredient in common clay, and sometimes called pure clay. When moistened with water it forms a plastic mass.

AMATORII. Pieces of pottery given by young men to their betrothed, as a tribute to their beauty. Such pieces are made principally at Pesaro, Italy, and are decorated with finely painted busts of women, always excellently, if a little stiffly, drawn. On a streamer or ribbon that fills the background, or sometimes on the background itself, is the name of the one for whom the piece is intended, as Lucretia diva, Camilla bella, etc.

AMATORII PLAQUE.

AMATT, ANTHONY, a thrower and meritorious painter, who died in 1851,

aged 92. He is said to have been born at Derby in 1759 and to have been apprenticed to a thrower who worked at Champion's, and to have worked there till their close.—*Jewett.*

AMBERG (Bavaria). There was a faïence factory here, but the date of its foundation is doubtful. Marked pieces are dated 1773 and 1774.

DECORATION ON AMBERG WARE.

AMBROSIA, one of the four sons of Andrea della Robbia.

AMERICAN CLAYS. (See clays.)

AMERICAN CHINA COMPANY, Toronto, O., manufacturers of earthenware. Established 1897.

AMERICAN CROCKERY COMPANY, Trenton, N. J. Earthenware. Established prior to 1879.

AMERICAN HISTORICAL EARTHENWARE. (See Historical Pottery.)

AMERICAN POTTERY COMPANY, Jersey City, 1825-1827. Natural porcelain was made here for a short time, but the venture was not a success. In 1829 the works were assumed by David Henderson & Co. (See Jersey City Pottery.)

AMERICAN PORCELAIN MANUFACTURING COMPANY, Greenpoint, N. Y. A company organized to continue the business of Charles Cartlidge, 1855-6. (See Cartlidge.)

AMERICAN PORCELAIN MANUFACTURING COMPANY, Gloucester, N. J. Incorporated in 1854, but was a complete financial and commercial failure. The Gloucester China Company succeeded them in 1857, but after vainly trying to produce china gave up the attempt in 1863.

AMERICAN PORCELAIN WORKS, Trenton, N. J. Established 1895 by N. W. Boch.

AMERICAN TERRA-COTTA AND CERAMIC COMPANY. (See Teco.)

AMEYA. The manufacture of Raku ware was introduced in Kioto about 1558-69, by a Corean named Ameya. He used a clay found in the neighborhood. Taiko Hideyoshi honored his son with a gold seal on which was engraved the character "Raku," signifying "enjoyment"; hence the name "Raku yaki." His work is very rare and much appreciated. He died in 1574, leaving a son named Tanaka Chojiro, and his descendants of the eleventh generation now carry on the business.

AMPHORÆ (Greek), large vases for holding wine, varying considerably in size and shape.

AMSTERDAM, LEONARD VAN, potter of Delft in 1721. To him are attributed the delicate faïence imitations of Meissen, and which are marvels of decoration. These pieces are signed VA or V or AV.

AMSTERDAM. The firm of Van Laun & Brandeis, whose trademark was a crowing cock, would seem to have carried on their business at Amsterdam and also at Arnheim. A manufactory was founded at Amsterdam about 1780 by a man named Hartog, of Breslau, who added to his name that of Van Laun, and was associated with Brandeis. All sorts of blue faïence were made here that were in no way unusual and that could easily be confounded with the most ordinary products of Delft. Some rare pieces of remarkable workmanship and distinctive blue are usually attributed to Amsterdam, but which we think should properly be ascribed to Arnheim. In the collection of Evenepoel, of Brussels, there is a piece painted with figure subjects in the costume of the eighteenth century, with a manufactory on a canal bank in the distance, and above on a scroll surmounted by a crowing cock (the trademark of Van Laun & Brandeis) are the words "Arnhemse Fabrique" (Arnheim Factory). M 11.

AMSTEL, Holland. A manufactory of natural porcelain was founded here in 1782, and carried on until the beginning of the present century.

ANATOLIAN. Sixteenth and seventeenth centuries. Small pieces such as cups and saucers, perfume vases, bowls, etc.; generally with a white ground incised with cross lines by means of a piece of wood scratching the soft paste, with a gay decoration of many colors, in which a brilliant yellow is conspicuous, in scale work, lattice and diapers. The seat of manufacture was at Kutahia.

ANCHOR. This mark has been extensively used as a trademark. It is the true Chelsea mark (A). It was sometimes used at Bow

(B), and its use continued at Derby (C). Davenports of Longport used it, but usually with the addition of their name (D). Other potteries who have used it are the Herculaneum Pottery, Liverpool

(E); at Worcester on transfer prints (F); at Sceaux (G); at Mettlach (L); Hubbe Brothers (I); Marseille of Koppelsdorf (J); T. Maddock & Sons, Trenton, on sanitary ware; Furnivals (K); Fell & Co. (L); Buen Retiro, Madrid (M and N); and several other German and Austrian factories. It was also used on Venetian china, sometimes alone and sometimes with the addition of the letters V. F. The illustrations show the designs, only not the exact size.

ANCONA. The church here is decorated on the outside with plaques of glazed earthenware, probably from Majorca.

ANCY LE FRANCE, France. A small factory was founded here about 1765 by the Marquis de Courtanvaux, and existed until the beginning of the present century.

ANDENNE (Belgium). At the end of the last century there were two potteries here. The first, founded in 1783 by Joseph Wouters, of Louvain, a very clever potter, who formed in the year following a partnership with two capitalists, Baron de Kessel and Baron van der Wardt d'Onsel, was not at first very successful. Litigation between the partners followed and Wouters was forced to retire. He established in 1789 a new factory, from which issued many remarkable groups, due to William Richardot, a very able modeler, born at Brussels in 1756. At the beginning of this century a large business was carried on at Andenne in printed earthenware. Specimens are marked ADW.

ANDREA, nephew of Luca della Robbia. His art is less simple than that of Luca, his fruit borders being especially heavy. He was born in 1457 and died in 1528.

ANDREOLI, GIORGIO, the prince of Italian ceramists of the sixteenth century. He was the son of Pietro, of Castle Judeo, in the Diocese of Pavaia. Accompanied by his brother Salambine, he went to Gubbio in the second half of the fifteenth century. He appears to have left there and returned in 1492, accompanied by his younger brother, Giovanni. They were enrolled as citizens May 23, 1498, on pain of forfeiture of 500 ducats if they left the city to practice their ceramic art. It was probably about this time that Giorgio was created a "maestro," a title prized even more than nobility. Contemporary writers state that majolica painters were considered noble by profession. Giorgio was not only a painter, but a modeler, an altar piece in the museum at Frankfort-on-the-Main giving him as high a place among modelers as he is acknowledged to have among artistic potters. His manner of decoration consisted of foliated scrolls and other ornaments terminating in dolphins, eagles, trophies, masks, etc., displaying very considerable power and invention. In

the drawing of figures Giorgio cannot be ranked as an artist of the first class. His works were enriched by the addition of golden and ruby lusters, the latter of which was used exclusively by him, though the best authorities are agreed that he was not the inventor of it. Probably nearly all the "istoriati" pieces of Urbino, Castle Durante, and other fabriques enriched with this ruby luster were so decorated at the Giorgio botega, many of them bearing the maestro's signature in addition to that of the original artist. Giorgio's finer and more important pieces were executed about 1525. A fine, large dish with a grotesque border surrounding the subject of Diana and her nymphs surprised by Actæon, lately in the possession of the baronne de Parpart, having been sold for $4,400. His son, Vincenzio, known as Maestro Cencio, worked with his father up to 1536, when he married and set up for himself. It is not known what share Giorgio's brothers had in the work generally ascribed to him.

ANGLO-ROMAN. Previous to the invasion of Britain by the Romans pottery had been made by the ancient Britons mostly for sepulchral uses, examples which have survived having been taken exclusively from grave mounds. They consist of cinerary urns for calcined human bones, drinking cups and food vessels for offerings of liquid and food. They are made of coarse clay mixed with pebbles and sand, and were probably fired in the funeral pile itself. The ornamentation was produced by a stick or thorn, and sometimes with the finger-nail. With the advent of the Romans and their higher civilization came a great improvement and extension of the art. Evidences of this are abundant. This pottery varied considerably in character at the three great centers of production, viz.: the Upchurch Marshes, in Kent; on the River Nen, in Northamptonshire; and the Salopian potteries. The Upchurch ware was either bluish black or dark drab, with a smooth surface,

CASTOR WARE.

graceful and elegant in form, and usually ornamented with incised lines or dotted figures. The Castor or Durobrivian ware of the Nen was more carefully thrown than that of Upchurch, and was afterward decorated with figures and ornaments in relief, usually laid on the wet clay in slip and then glazed. These potteries must have been of great extent, as Dr. Birch is authority for the statement that they have been traced for twenty miles along the banks of the Nen. When the clay was exhausted at one spot the potters moved further up the river, leaving behind them the failures of their craft. The Salopian ware was of two kinds, the one white, the other of a rather light red color. In addition to these great centers, pottery was made in many other localities. Tiles for all building purposes were evidently made at the place the building was to be erected, and not infrequently the names of the legions and cohorts quartered in the localities where they were made are found impressed on the tiles.

ANGLO-SAXON. After the conquest of the Romans the Saxons seem to have relied almost entirely for their supply of pottery on that left by the Romans and that produced by Romans remaining in the country. To this there is an exception, viz.: the manufacture of cinerary urns, many specimens of which have been found. The Saxons appear to have had an aversion to pottery for culinary purposes, their bowls being made of wood and their drinking-cups of horn.

ANGOÛLEME, a manufactory of hard porcelain situated in the Rue de Bondy, Paris; established about 1780. The two founders, Messrs. Guerhard & Dihl, were men of great ability, and their products soon acquired considerable importance. Dihl was a good chemist, and his discoveries considerably enriched the palettes of china painters. Before the Revolution the stamp was the cipher of the Duc d'Angoûleme. After the revolution the firm name in full was used, replaced by "Manufac de Mgr. le Duc d'Angoûleme a Paris" upon the Restoration. The china manufactured here is often erroneously called "Porcelain d'Angoûleme," the correct term being "Porcelaine du Duc d'Angoûleme." M 12.

ANGOÛLEME. About the middle of the eighteenth century an old monk, L. Sazerac, a native of Saintes, founded at Angoûleme a factory that appears to have produced common pottery only, decorated in faint colors, but with a very beautiful and rich glaze. A retrospective exhibition was held in Angoûleme, June, 1893, and some curious pieces from this factory were shown, notably a clock case and a lion with its paw resting on the escutcheon of the arms of France.

ANKER, an artist employed by Theo. Deck, of Paris.

ANNABURG, Germany. There is a manufactory of stoneware here, established 1874. M 13.

ANNAFIELD POTTERY, Glasgow. John Thompson & Co. formerly made both china and earthenware here, but the works have been closed for some years.

ANSPACH (Bavaria). Exact copies of the faïence of Rouen were originally made here, but later the imitations gave way to more original designs and the body of the ware was considerably improved. The enamel was of perfect whiteness, but the blue in which the greater part of the designs were executed had not the brilliancy or transparency of that of Rouen. The mark was usually an A in blue. Mark 14 was also used.

ANSETTE, FRANCAIS, was controller of the Niederville works and earned thirty sous a day. We find from a public document that he was exempted from taxation in 1759.

ANTEAUME, a painter of animals and landscapes at Sèvres during its first period, 1753-1800.

ANTONIBON. (See Nove.)

ANTWERP. According to Piccolpasso, an author who wrote in 1548, it was an Italian from Castel-Durante, named Guido di Savano, who founded in the sixteenth century a faïence manufactory at Antwerp. No specimens appear to be known.

APOSTLE MUGS. So called from their embellishments. These are made of stoneware and were made in Germany in the seventeenth century.

APPEL JOHANNESDEN. Established in Delft in 1750, at the sign of the Golden Boat. The Mark is I. D. A.

APREY, in Haute Marne, the eastern province of France. A manufactory was founded here in 1750 by Lallemand de Villehaut, Baron d'Aprey, who had already a glass manufactory here. The shapes were of elegant form, copied mostly from goldsmith's models. For the decorations, they were noticeable only for two features—the application of designs hitherto

exclusively used on china, on faïence body, and to the bird paintings of Jarry. To his ability the factory chiefly owes its reputation. Owing to business reverses the works later passed into the hands of Baron d'Anthis, of Longpierre, and in 1789 he was in turn succeeded by D'Olivier, a very clever potter. For some unexplained reason the principal pieces are seldom marked. Those of less value and finish bear the initials AP conjoined, often followed by those of the painter or decorator. M 15.

APT, near Avignon, France. Marbled ware made by mixing different colored clays, and similar to the agate ware of Staffordshire, was made here in 1780 by Bennet, and up to 1802 by the Widow Arnoux. That made by the latter was often ornamented with finely modeled flowers in relief.

ARABESQUE, a term applied to an arrangement of foliated scrolls, probably first introduced in the ornamentation of Arab mosques by Persian workmen during the occupation of the country by the former in the eighth century.

ARAB POTTERY. The Arabs probably acquired much of their knowledge from the Persians. Themselves a barbaric race, their intercourse with the nations they conquered gradually imbued them with a taste for art, which they were quick to absorb. Persian art seems to have especially captivated them, and this they modified to their religious ideas, carefully eliminating all that savored of idolatry. When the Arabs came to Europe, or met the Crusaders in Palestine, they were called Saracens; hence the term Saracenic art, as applied to Arab pottery. The art traveled with them, as later it did with the Romans, the pottery of Spain, Sicily and Italy being conclusive evidence of this. No doubt stanniferous enamel was taken by them to Europe, where the secret of its manufacture became lost, and was only rediscovered after the lapse of many centuries.

ARBOIS (France). Contemporary writers of 1788 make mention of a factory directed by Giroulet, to whom are no doubt due the patriotic pieces whose existence Max Buchon pointed out in 1867. Specimens in the Sèvres and other museums are dated 1746 and 1787.

ARCHAIC. Greek pottery, so-called, made from the sixth to fifth century, B. C. The decorations consisted of black figures and ornaments on a light reddish ground.

ARCHITECTURAL POTTERY COMPANY, Poole, Dorset. Established in 1854, John Ridgway being one of the original partners, but he retired in 1857. The manufacture of flooring and wall tiles, glazed bricks, etc., is extensively carried on.

ARDE, ADRIAN VAN, was measurer of earths and clays imported

to Rotterdam, A. D. 1693, and gave evidence when Champion made application for his patent.

ARDUS, near Montaubau, France. The manufactory at Ardus was established in 1737, and produced decorated faïence in the style of Moustiers. The body, however, is heavier, the white enamel less brilliant, and the execution generally not distinguished by the same careful treatment. About 1752 the manufactory was directed by a woman — Louise Pichon, whose name is found on several pieces of simple decoration. *"Fait a Ardus, près Montaubau, le 14 May, 1752, Pinchon, Vve."* Another painter whose signature is met with on Ardus ware was Matthew Rigal. The hospital at Montaubau has a pharmacy entirely composed of jars made at Ardus, and decorated in blue foliage and arabesques in the style of Nevers.

ARITA, Province of Hizen, Japan. The seat of a large porcelain industry. In a hill near by are to be found all the necessary materials for making porcelain, and every manufacturer helps himself without restraint, and, being under no control, can bring away whatever he requires. A great squandering of material necessarily results. Here are made the pieces for the Emperor's table—a very clear, translucent porcelain, with cobalt decorations, either the chrysanthemum or the imperial coat-of-arms. Kiheiji, a celebrated maker, accidentally discovered the use of saggers (about A. D. 1700). On opening a kiln he found that one pot had fallen inside a larger one on a lower stand, and while breaking away the outer piece he found, to his astonishment, a finished production. This suggested to him the use of an outer box or sagger. The article to be baked is placed in a sagger, covered with a lid, and the joint luted so as to seal it hermetically. After firing, the sagger has to be broken. This process is known as Gokuhin, and is only used in firing valuable pieces. Tsuji Katsuzo, a descendant of Kiheiji, is one of the distinguished manufacturers of to-day, and is especially skilled in piercing porcelain.

ARK, a large wooden bin where the raw clay is stored. Early

English and Scotch writers use the word in place of chest or coffer, as "an ark for meal."

ARNOLD, PHILIP, was a sculptor at Neiderviller in 1759, where he received the modest stipend of twenty sous a day, and was exempted from taxation.

ARNOLDI, C. E., & F., Eigersburg. Established in 1808. A small china manufactory employing about fifty workmen.

ARNOUX, LEON, son of the Widow Arnoux, of Apt. Whatever ceramic triumphs were achieved by the house of Minton during the latter half of the last century, they are so inseparably connected with the services of Mr. Arnoux as to make the one but the recital of the other. It was in 1848 that Mr. Herbert Minton was fortunate enough to secure his services, and he came to England with the reputation of being, perhaps, more thoroughly versed in the mysteries of ceramics than any other *savant* in France. Originally engaged as the practical potter of the establishment, his refined taste, his keen appreciation and knowledge of art were but a part of the qualities that were immediately recognized, and which commanded a wide range; and he was quickly installed in the double position of potter and art director. The progress made by the house of Minton, both artistically and commercially, are the best evidences of the acumen of Mr. Herbert Minton in his selection of a man to fill such a responsible position. Some of the achievements are briefly sketched in our article on the Minton firm, and need not be recapitulated here. Of a genial disposition, with a quiet dignity all his own, he endeared himself to all with whom he came in contact, and is now, in the autumn of his life, enjoying a well-earned repose. (See also Artificial Porcelain.)

ARRAS (France). A manufactory of soft porcelain was established here in the eighteenth century, but it never rose to much prominence. The decorations were chiefly in blue, and usually marked with the initials AR.

ARSENAL POTTERY, Trenton, N. J.; Joseph Mayer, proprietor.

ARTICULATED, or jointed porcelain. One of those curious triumphs of the Chinese potter in which the vase being made in two sections the inner piece is loose, though not removable.

ARTISTIC PORCELAIN COMPANY, Trenton, N. J. Founded in 1893 by N. W. Boch.

ARTIFICIAL PORCELAIN. When porcelain was first introduced into Europe from China its composition was unknown, and men eagerly sought to penetrate the secret or to produce an imitation of it. This natural or hard porcelain was formed of two materials only—

kaolin and petunste—and even when the secret of its composition became known the existence of kaolin in Europe was unknown. The first success of which there is proof was gained at Florence in 1581 (see Medici). This was followed by Dwight's (see Dwight) questionable discovery in 1671, and that of Chicanneau, at St. Cloud, in 1695. But in France, twenty-two years earlier (1673), a patent was granted to Louis Poterat, of Rouen, for making porcelain, and though he undoubtedly produced a few pieces, he did not follow up his success. In England it was made at Bow about 1740; in Spain, at Buen Retiro, in 1760; in the United States, at Philadelphia, about 1770. The composition of these artificial or soft porcelains varied very considerably. For instance, that of Sèvres was produced by first making a frit of saltpetre, sea salt, burnt alum, soda ash, gypsum and sand, which was then partly vitrified, then ground and mixed with chalk and clay. In England the mixture was more simple—white clay, white sand and glass being the principal ingredients—the latter being used to give translucency. Later, bones were used (see Bow). Bone china has continued to be made in England in preference to a natural porcelain, and the position has been ably defended by Mr. Arnoux, who says: "Certain very particular amateurs bring an objection against British porcelain, and say that as it has phosphate of lime for its base instead of being composed entirely of *pate frittee*, it has no claim to be called *pate tendre*. This objection appears to be nearly groundless. The chief beauty of the *pate tendre* consists of the complete amalgamation of the colors with the glaze, and also in its capability of receiving certain tints which cannot be applied to any other kind of porcelain, such as turquoise blue, emerald green and rose du Barry. If our porcelain comprise these qualities in the highest degree—if its whiteness and transparency have been increased by the employment of phosphate of lime, who has any reason to complain? Our productions possess all the advantages of the old porcelain and have in addition several accessory ones. We shall therefore do wisely to uphold this manufacture, since it brings us nearer to perfection." In France artificial porcelain is termed *pate tendre* (which see).

ASAHI WARE. The factory from which this ware emanated was founded in the Shoho period (1644-7) and is situated at Uji, in the Province of Yamashiro. The name Asahi yaki is derived from its color, resembling the morning light. At the present time tea-jars and tea-vases are largely manufactured here. Uji is the center of the tea cultivating district of Japan.

ASCIANO, Italy. It was here that Luca della Robbia founded a

kiln which enabled him to fire a piece he had painted for the church Dei Minori Conventuali, representing the Virgin, the angel Raphael, the young Toby and St. Anthony.

ASH, JOHN, pot-maker, Bottle Lane, Nottingham. From a list of burgesses and freeholders of the town and county of Nottingham, published in 1774.

ASHLAND POTTERY COMPANY, Chittanango, N. Y. Make terra-cotta in works previously occupied by the Chittanango Pottery Company.

ASHWORTH, GEO. L., & BRO., Hanley, Staffordshire, manufacturers of Mason's ironstone china. They succeeded to the business in 1859. (See Mason.)

ASKEW, R., a painter of cupids, etc., at Derby (1772).

ASKOS (Greek). Literally a wine-skin. The askos has an aperture and neck at one side, from which a handle passes over a hollow of the body to the other side. They were frequently decorated with red figures.

ASQUITH, WOOD & Co., Castleford, Yorkshire, 1825-54. A stoneware manufactory.

ASSELIU, a painter of miniature portraits at Sèvres during its first period, 1753-1800.

ASSYRIA. The pottery of Assyria and Babylon, no less than their history, are so closely associated as to make it difficult to separate the one from the other, and the matter is therefore fully treated under the head of Babylon.

ASTBURY, EDWARD, & Co., Longton, Staffordshire, china manufacturers. Shirley & Freeman established the works in 1863, and they were succeeded by Hammersley, Freeman & Co. The firm style changed in 1870 to Hammersley and Astbury, and in 1875 to its present style. M 16.

ASTBURY, JOHN, a potter of Burslem, Staffordshire. When the Elers were established at Bradwell their works were carefully guarded so as to preserve the secret of the process. Astbury feigned idiocy and gained employment there, and eventually acquainted himself with their processes. Whatever opinion we may have of his integrity, his shrewdness resulted afterwards to the general good of the community, for, besides possessing considerable powers of invention, he soon modified and enriched their methods, and made a large variety of curious wares. Mr. A. H. Church says of his work: "Never quite equal in fineness of body and sharpness of ornament to the productions of Elers, the works of Astbury are not mere imitations—at least, the majority of his extant pieces cannot

be so called. For the paste or body of his ware he used clays, or mixtures of clays, which burnt to a red, fawn, yellow, buff, orange or chocolate tint—some of these colors being developed by the glaze. Generally his ornaments were applied in Devon or pipe-clay and stamped. They consisted of foliage and May flowers, crowns, harps, stags, lions, birds and heraldic ornaments. For the inside of his teapots and other vesels he often used a wash of white clay, and he was always making experiments in the mixing and tempering of clays." In 1720, while on a journey to London, he noticed that a hostler burnt a piece of flint to a white powder, to use in doctoring the eyes of a horse. Struck with its whiteness, he thought it might improve his earthenware, and after some experimenting was able to determine the due proportion to put in the body of the ware to secure higher degree of refractoriness in the kiln and less shrinkage. Astbury's influence on the progress of potting in England has, we think, never been properly appreciated. His conduct in the matter of Elers Brothers cannot be defended, but his subsequent discoveries and the generous manner in which he shared them with his brother potters in a great measure atone for it. Astbury died March 3, 1743, aged 55, and was buried at Stoke-upon-Trent.

ASTBURY, THOMAS, son of above. He commenced business in Shelton in 1723, and made further improvements in the body of earthenware. He was the first to call it "cream color," a name used to the present day, though generally abbreviated to "C. C."

ASTBURY & MADDOCK, Trenton, N. J. (See Maddock.)

ASTBURY & MILLINGTON, Trenton, N. J. (See Maddock.)

AUBAGNE, near Marseilles, France. About 1788 there were at Aubagne sixteen or eighteen factories. The faïence was unmarked and was in the style of Moustiers. But its reputation is chiefly based on the manufacture of china frames enclosing figures, generally of a religious character, on a velvet background.

AUBERT, the elder, flower painter at Sèvres. First period, 1753-1800.

AUBRY, M., director of the "Manufactur royale de Bellevue," near Toul, France.

AUDUN-LE-TICHE (Meurthe et Moselle, France). A manufactory of faïence was established here in 1748 by François Boch, a molder of iron castings, and his son-in-law, Valette, a journeyman potter at St. Clement. After Valette's death, Boch's three sons, Jean François, Dominique, and Pierre Joseph, managed the pottery and became proprietors after the death of their father in 1754. A few years prior to this (1748) Pierre Joseph tried to establish a factory

in Lorraine, but abandoned it owing to an unsuccessful lawsuit. Procuring a license to erect a manufactory at Septfontaines, near Luxemburg, the works at Audun-le-Tiche were given up, and the three brothers there inaugurated a business which has been carried on by their descendants to the present day. (See Villeroy & Boch.)

AUE, Germany, kaolin discovered at, A. D. 1710. (See Bottger.)

AUGUSTUS II. acted as director of the royal factory at Meissen from 1731 to 1733.

AUGUSTUS III. was director in 1778.

AULT, W., Burton-upon-Trent (England), a modern factory producing much artistic ware, chiefly relying for its beauty upon the richness of the glaze.

AUSTRIAN SHIELD. This was originally used as a trademark at the Royal Vienna Factory, having been adopted about 1747 (see Vienna). It is now indiscriminately used by various manufacturers and decorators and gives no added value to the piece it is placed on.

AUTEUIL. (See Haviland & Co.)

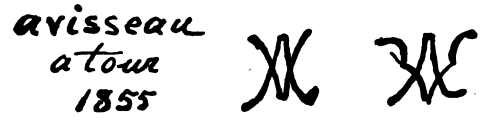
AUVILLAR (Tarn-et-Garonne, France), possessed in the eighteenth century several manufactories whose products imitated more or less rudely the faïence of Moustiers and Rouen. The enamel is very smooth and beautiful. Some pieces of a more careful execution are attributed to a ceramist of Italian origin named Lindon, who introduced at Auvillar decorating on the glaze.

AUXERRE (Yonne, France). At the end of the last century some common faïence in the style of Nevers was made here. A factory founded in 1789 by Claude Boutet, in the old convent of the Capuchins, was in existence until about 1820.

AVIGNON (Vancluse, France). Although the archives of Vancluse furnish us with the names of the Avignon potters from the beginning of the eighteenth century, nothing is known of the history of the manufacture of the beautiful pieces of red clay with their warm and limpid brown glaze, made in the seventeenth century, and for which Avignon was celebrated. Avignon in the eighteenth century had a faïence manufactory, the products being characterized by a brilliant enamel and soft shades of color, the decorations being principally landscapes. At the corner of the Place St. Joseph and the Rue Trois Colombes at Avignon may still be seen a plaque bearing the inscription "Fabrique de Faïence Chez Carbonel, 1737."

AVISSEAU. Charles Jean Avisseau was born at Tours, December 25, 1796. He was at first a working potter at Sainte-Pierre-les-Corps, and afterward at Beaumont-les-Autels. Here he saw a piece

of Palissy ware, which produced on him the determination to recover the secret of its manufacture and to employ those enamels which people said were lost. During fifteen years he prosecuted his researches, and, like Palissy, had to endure misery and privation and the mocking of his friends—at one time buoyed up by hope, at others almost driven to despair, but never entirely losing his courage. In 1845 his products became known, and the modest potter found himself becoming famous, not only by his neighbors, but in Paris also. He had to fight a temptation which many others no less poor than he could not resist. A large number of amateurs and dealers in curiosities endeavored to persuade him not to sign his pieces, offering him greatly enhanced prices for wares, so that they could sell them as genuine Palissy pieces. All these advances he indignantly refused as being insulting to his probity and injurious to the honor which his work merited. The exhibitions in London and Paris of 1851 and 1855 confirmed his reputation, and brought him, if not riches, at least a modest competence. Working only with the aid of his son and daughters, Avisseau produced but little, and each piece that came from his hands represented the labor of several months. He died February 10, 1861, leaving for an heritage the memory of a life of hard work and honor, and the glory of having been one of the initiators of that movement of artistic renovation which has placed French ceramics in the first rank of modern industries. His son, Edouard Avisseau, worthily continues his work.



AWAJI ware is from the Village of Iganomura, Island of Awaji, Japan. It is of a delicate yellow tint, like Awata ware, having a beautiful glaze covered with fine cracks and carefully painted with transparent enamels. Another class of ware is a strongly baked biscuit, glazed with a very fusible mixture of sand and oxide of lead, so soft that it cannot be again fired in a kiln after painting. It is sometimes called Minpei yaki, from the name of the founder, whose son, Sanpei, is now occupied in producing the same goods.

AWATA, eastern district of Kioto, Japan. There are now about twelve families, each with a kiln, manufacturing Awata ware. Up to ten or twelve years ago the decoration was confined to light figure sketches, but later, flowers, landscapes, etc., have been successfully

produced. Imitations of old Satsuma have been extensively produced here.

AYNSLEY, JOHN, & SON, Longton, manufacturers of china; established in the first part of the present century. Mr. Aynsley is also largely interested in many other factories in Longton. M 17.

AZULEJOS, enameled tiles painted or in relief, applied particularly to the tiles manufactured in Spain during the Moorish occupation of that country and used in the interior and exterior decoration of buildings, and which by grouping often form a great decorative picture. They were manufactured principally at Valencia, where the manufacture is still carried on. There were in 1755 at Valencia three manufacturers of Azulejos—Dieden, Cola and Casanova.

AZURE POTTERY, made in the neighborhood of Beauvais, Oise, France, about the middle of the seventeenth century. It was a stoneware covered with plain blue enamel, and was considered to be of sufficient value to present to sovereigns and call for notice from Rabelais and other contemporary writers. (See Beauvais.)

B

BABYLON. The pottery of Babylon and Assyria is among the most wonderful of the world's productions. Not for the beauty of its form or the perfection of its workmanship, but that it has served to reveal to us the history of its kings, its wars and customs; has instructed us as to their knowledge of astronomy and mathematics; revealed even their love-letters, their family life and religion, and shown to us the sites of cities hitherto but vainly guessed at. The British Museum has thousands of clay tablets found at Ninevah, each covered with minute hieroglyphics and relating to events twenty-five hundred years before Christ. This was the lending library of the city; the school where the history of the country could be read and studied by all who so desired. And on the colophon or docket attached to each tablet the king who caused the library to be made says: "The wise things of Nebo, all there was on tablets, I wrote, I engraved, I explained, and for the inspection of my people in my palace I placed." These tablets, usually octagonal in form, were from eighteen to thirty-six inches in height. Assyria and Babylon both got their knowledge of pottery from the Egyptians. The employment of copper to produce a brilliant blue enamel was very early known in both countries, as was also the use of tin in the

producing of white enamel. These enamels, with others, are found upon both bricks and vases.

BABUT, JEAN. (See Bergerac.)

BACCHUS, THOMAS, Lane End, Staffordshire. A potter who married the widow of Astbury. Astbury died in 1743.

BACHELIER, superintendent of the painting and gilding at Vincennes, a man of much originality and taste, who rendered great service to the industrial art of the close of the eighteenth century, and made possible the perfection attained at Sèvres.

BACINI, plates or dishes of colored and glazed earthenware used to decorate the towers and façades of churches in Italy early in the fourteenth century.

BACON, JOHN, a clever sculptor who produced some notable pieces at the old Bow china works.

BADDELEY, R. & J. After the introduction of salt glazing in Staffordshire, the trade of the district, which had been confined to supplying the immediate neighborhood, quickly assumed wider proportions, and to meet the demand the Baddeleys erected four ovens in a row behind their manufactory at Shelton. At this period, early in the eighteenth century, this was considered a very large undertaking, as so small was the trade that the potter in his modest thatched hovel was considered to be doing a fair business if he could produce five pounds' worth of ware in a week. About 1750 R. & J. Baddeley made the first attempt at blue painting under the glaze, afterwards adopted by all the other potters.

BADDELEY, RALPH B., was in business at Hanley in 1794, and John and Edward in 1796.

BADDELEY, WM., commenced making brown ware at Eastwood, Hanley, in 1720. In 1740, having invented an engine lathe, he began to make turned articles in brown and cane ware. He was succeeded by his son William, who made imitation Wedgwood ware, marking it EASTWOOD, but the first syllable was always illegible, so that it was often mistaken for Wedgwood ware. His other son, John, made a fortune out of the lathe invented by his father.

BADEN. A china manufactory was started here by workmen from Hochst, and who later sold the secret of the composition of china to Berlin. The Baden factory existed from 1753 to 1778. M 18.

BAENSCH, HENRI, china manufacturer, Lettin. Established 1858.

BAGNALL, CHARLES, one of the six Staffordshire potters who purchased Champion's patent. He was probably the son of a potter of the same name, a maker of butter pots at Burslem, 1790.

BAGGALEY, JACOB, joint partner with Jos. Machin and Wm. Machin, 1809 to 1840 (about) in the works now operated by T. & R. Boote.

BAGULEY, ISAAC, Rotherham, England. When the Rockingham works were closed in 1842, Baguley, who had been a painter there, and previously at Derby, started in business as a decorator, and continued the use of the Fitz William crest as a trademark.

BAILEY, WM., AND WM. BATKIN made lustered earthenware at Shelton in 1823, claiming to be sole patentees of the same.

BAILEY, WM., & J. A., Alloa, N. B., manufacturers of stoneware. M 19.

BAILLEUL (Nord, France). The faïence of this city equaled that of Rouen, and had the advantage of being able to stand a harder fire. Same as St. Amand-les-Eaux and other factories of the north. Many pieces in white on a dark Persian blue ground were produced.

BALEARIC ISLANDS. (See Majorca.)

BANKO WARE. About 1652 to 1660 a man named Banko Kichibei established a kiln at Koume-Mura, on the boundaries of Tokio. The ware from this kiln, which in character and ornament somewhat resembled Satsuma, are now known as Yedo Banko. This manufacture has been discontinued, and the Banko ware of to-day is made at Kuwana, Province of Ise. The Kuwana factory was started about 1830 by Yiusetsu, who assumed the name of Banko. Later, Hashimoto Chiuhei established a kiln in Kawasaki, where he produces similar ware, but not equal to the original. Banko ware is also made at Yockaichi, Province of Ise.

BANKS & TURNER, Stoke-upon-Trent, potters prior to 1780, in which year Josiah Spode occupied the works formerly carried on by them.

BARBARINO. (See Forasassi.)

BARBATINA (Italian). For the finer class of work at Castel Durante, Italy, a clay washed from the river and called "bianco allattato" was used. The turnings of this, mixed with shavings of woolen cloth, were used to attach the handles and other molded ornaments, and was known as "barbatina."

BARBEAUX. This name is given to a decoration of scattered cornflowers over a portion or all the piece, giving a fresh and pleasing appearance, and is often employed on French china, notably that of La Courtille. At Sceaux, Epinal and other factories it was also used on faïence.

BARBERINI. (See Portland vase.)

BARBER, EDWIN ATLEE, author of "The Pottery and Porcelain of the United States," was born at Baltimore in 1851. During the

years 1874 and 1875 he was a member of the United States Geological and Geographical Survey of the Western territories under Professor F. V. Hayden, visiting with this party of scientists the prehistoric ruins of Colorado and Utah and acting in the meanwhile as correspondent of the New York *Herald*. Mr. Barber has been an enthusiastic investigator of American ceramics, and the result of his researches he has made us acquainted with by his unique collection in the Pennsylvania Museum, his numerous contributions to contemporary literature and his more ambitious work, "The Pottery and Porcelain of the United States," published in 1893, and which has now passed into a second edition. His work entitled "Anglo-American Pottery," also in its second edition, is the recognized authority on the subject. Mr. Barber is a facile and pleasing writer, and it is not too much to say that all writers on American pottery will of necessity owe him a debt of gratitude for the ceaseless perseverance he has displayed in clearing up points in dispute, in recording merit which but for him might never have found a chronicler, and unearthing quaint pottery whose existence had not been before suspected. A notable example of this latter is his discovery of slip painted ware bearing "Pennsylvania Dutch" inscriptions made in the German settlements of Pennsylvania from 1759 to 1850. His contributions have also taken a wider field, his excellent articles on American historical pottery having been eagerly read. In 1892 Mr. Barber was honored with the appointment of Honorary Curator of the Department of American Pottery and Porcelain of the Pennsylvania Museum and School of Industrial Art at Philadelphia, and became Curator in 1901.

BARBIN founded in the year 1735 the manufactory of soft porcelain known as Mennecy-Villeroy (which see).

BARBIZET, Paris. Established 1850. Imitations and reproductions of Palissy ware.

BARBMANS, the German name for bellarmines (which see). They were largely made near Cologne and at Raeren.

BARBOTINE (French), slip for fixing handles, etc., as above. Of late years the name has been extended to earthenware decorated with colored clay. In the hands of skilful artists very satisfactory results can be obtained; but the process has been used to imitate oil paintings on pottery—an absurdity which has brought the process into desuetude.

BARCELONA, Spain. Lustered pottery was made here in the thirteenth century. To-day it produces some fine artistic pieces of modern art in terra-cotta.

BARDI, of Montelupo, makes the ever-popular ware called after the seat of his factory. Its shiny brown ground, on which are raised figures of different colors, often produce excellent effects. It is principally used for jugs, flower-pots, etc.

BARKER & SON, Burslem, Staffordshire, manufacturers of earthenware, 1851-60. M 20.

BARKER, SAMUEL. (See Don Pottery.)

BARKER, SAMUEL, & SON. (See Don Pottery.)

BARKER, C. G., formerly of the Sylvester Pottery, Burslem, Staffordshire.

BARLOW, ARTHUR, an artist at Doultons, Lambeth.

BARLOW, HANNAH B., a skilful delineator of animals at Doulton's, Lambeth. Her designs of animals, etc., incised in stoneware, are very successful.

BARNY, RIGONI & LANGLE, china manufacturers, Limoges, France. M 21.

BARONI, proprietor of the Nove Works, 1802. (See Nove).

BARR, MARTIN, entered into partnership with Flight in 1791. (See Worcester.)

BARR, FLIGHT & BARR. (See Worcester.)

BARTOLOMEO, LUCA DEL FU, an Italian artist or potter about A. D. 1544.

BARTLEM, a Staffordshire potter who in 1766 emigrated to South Carolina, where he attempted to make pottery, but the effort was unsuccessful.

BARYTES, used in the paste of Wedgwood's jasper. "The white particles of the barytes served to reflect the colors of the various oxides used as staining materials for the differently tinted jaspers."—*A. H. Church.*

BASALTES. (See Egyptian black.)

BASSANO, near Venice. A faïence works was established here about 1540 by Simone Marinoni, but the products are little known. At the commencement of the eighteenth century the works had passed into the hands of the brothers, Bartholomew and Antonio Terchi, of Rome. A new factory was established in 1753 by Giovanni Salmazzo, the productions of which were marked G. S., but they do not call for particular notice.

BATES, ELLIOT & CO., BATES, GILDEA & WALKER, BATES, WALKER & CO., Dalehall, Staffordshire. Three of the many styles under which the Dalehall works, founded by Joseph Stubbs, were carried on. (See Joseph Stubbs.)

BAT PRINTING. The impression from the copper plate is taken

on a small square of prepared glue, in oil instead of color, transferred to the ware and then dusted with color. It is principally used for crest printing.

BATTISTO FRANCO, an eminent Venetian artist employed by Duke Guido Valdo II. in the botega of Pesaro (A. D. 1540-60.)

BAUER, ADOLPH, china manufacturer, Magdeburg-Neustadt. Established 1865.

BAUER, ROSENTHAL & Co., Selb, Bavaria. Some remarkable vases with figure subjects modeled in high relief are made by this house, the best work being reproductions from designs by Oppel, of Nuremburg, and M. Hiller, of Vienna. Herr Bauer was formerly the art director for Tielsch & Co.

BAUM, J. H., Wellsville, Ohio, manufacturer of white granite. Closed out October, 1897.

BAWO, FRANCIS H., was born at Haussen, Germany, October 3, 1834, and started in business in New York City in 1864, together with Charles T. Dotter, under the name of Bawo & Dotter. Mr. Dotter retired from business in 1888. In 1872 the "Élite" works were established in Limoges, France, and in 1896 a white china factory was added. In 1883 decorating works were started in Fischern bei Carlsbad, where staple goods for table use and a large line of fancy articles are produced. In 1888 a glass refinery and decorating works were opened at Steinschoenau, Bohemia, for the manufacture of engraved and fancy decorated table glassware and decorated fancy articles. In 1894 a store was opened in Paris, and selling agencies for the products of the different factories were established in London, Berlin, Hamburg and Brussels. The main European office is located at Koetzschenbroda bei Dresden, Germany.

FRANCIS H. BAWO.

BAWO, C. F. W., was born in Dresden, Germany, on March 15, 1871; entered into business of Bawo & Dotter in 1888, and was admitted as partner in 1897.

BAYARD & BOYER, proprietors of the "Manufacture royale de Bellevieu," near Toul, France (A. D. 1771). (See Bellevieu.)

BAYEUX. There is a china manufactory here, established in 1810. Also one of tin-glazed earthenware decorated with subjects taken from the famous tapestry of Bayeux.

BAYLIES, DR. W., the largest of the original shareholders in the Worcester works.

BAYREUTH, Bavaria, at the commencement of the sixteenth century had a manufactory of stoneware ornamented with figures and medallions in relief. Later, a thin fine faïence was made, decorated in a soft blue, and usually marked B. K. or B. P.

BEADS. Among the multifarious objects produced in Italy during the early years of the sixteenth century were beads for necklaces, inscribed "Andrea," "Bella," "Margarita," etc.

BEAR JUGS. During the close of the seventeenth and throughout the eighteenth century a jug in the shape of a bear with a movable head constituting a cup was in common use in the taverns and alehouses in England. Some were in yellowish and reddish brown stoneware and were made at Nottingham. The black and white ones may be attributed to Chesterfield (Derbyshire) and Staffordshire. The brown ones were generally smooth, but more frequently coated with rough scraps of clay.

BEAUMONT, ADALBERT DE. (See Collinot.)

BEAUVAIS, Oise, France. As early as the thirteenth century Beauvais was celebrated for its glazed pottery. *"On fait des godets à Beauvais, et des poeles à Villedieu."* (They make cups at Beauvais and frying-pans at Villedieu.) "Godet was the name given to a goblet with a wide aperture, sometimes fashioned in the shape of a cup, and often with a cover." Some of the pieces made

at Beauvais are frequently cited in the "Royal Inventories" as of value, and some as being embellished with silver. The Azure pottery of Beauvais was greatly renowned in the sixteenth century and was mentioned by Rabelais and others of this epoch. It is still the center of a considerable stoneware trade.

BECK, A. M., built a pottery at Evansville, Ind., in 1882 and made majolica. He died in 1884 and was succeeded by Bennighof, Uhl & Co. They gave place in 1891 to the present Crown Pottery Company, who make white granite.

BECKWITH, ARTHUR, New York, author of "Majolica and Fayence," published in New York, 1877.

"BEELEY," the diminutive of Billingsley (which see).

BEECH, RALPH BAGNALL, Kensington, near Philadelphia, had a pottery here from 1846 to 1852. There is a vase bearing his name in the Philadelphia Museum, with a full-length portrait of Stephen Girard.

BEERBOWER, L. B., & Co., Elizabeth, N. J., manufacturers of cream-colored ware. The factory is now closed. Mr. Beerbower was formerly connected with the Phoenixville works.

BEECH, JAMES TUNSTALL, successor to Podmore, Walker & Co., earthenware manufacturers, M 22.

BELL, SAMUEL, a Staffordshire potter to whom a patent was granted in 1729 for a new method of making a red marble stoneware to imitate ruby.

BELL, J., & M. P., Glasgow, manufacturers of earthenware. Established 1842. M 23.

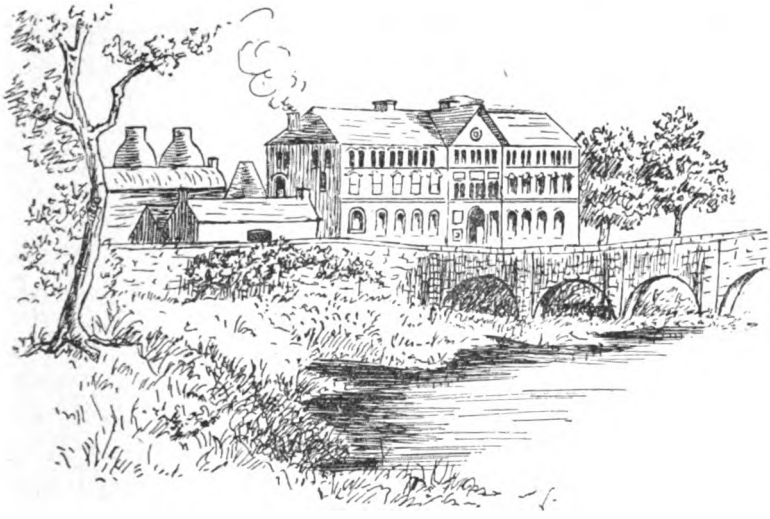
BELL BROTHERS, Findlay, Ohio, manufacturers of vitrified china. The capacity is six kilns.

BELGIUM. The faïence of Belgium is closely allied to that of France, and compares favorably with the best Rouen productions, the best coming from Brussels. Tournay did not rise to any importance before the advent of Peterynck of Lille (1751). With the assistance of English potters he succeeded in producing china, some of which equaled that of Sèvres. Henri Pulinex had a factory at Bruges in 1753, and a small one was established in the park of the Château Tervueren by the Duke of Lorraine for Marie Theresa, but it only existed from 1767 to 1781. Boch Brothers, of La Louviere, have of late years produced some excellent work, reproductions of Delft and Rhodian wares being conspicuous features. There is a manufactory at Hasselt producing mostly colored glazed ware, some of which is ornamented with figures attached to the shoulders or handles of vases. These exterior decorations include also wall-

modeled flowers. There are also factories at Nimy and Quaregnon-Wasmuel.

BELLARMINES. Jugs derisively named after Cardinal Bellarmine, who died in 1621. By his opposition to the reformed religion he had made himself obnoxious to the Protestants, who to show their detestation of the man used the potter's art to caricature his short statue, rotund figure and hard features, and these jugs became a popular and biting burlesque on him. These were first made or perhaps imported from Cologne, and afterwards at Fulham and other places in England.

BELLEEK is a fine glazed Parian body washed with metallic lusters. It is made by what the French call the *"coulage"* process,



BELLEEK.

and which we designate as casting. A plaster mold is filled with clay diluted by water to the consistency of cream, and known as "slip." The plaster absorbing the water leaves a layer of clay adhering to the molds, and when this attains the required thickness the remainder of the slip is emptied from the mold, and after drying for a short time the cast can easily be removed. Parian being a non-plastic body, cannot either be thrown or made in a dry mold. This ware first attained any degree of popularity at the manufactory of Messrs. McBirney & Armstrong, of Belleek, County Farmanagh, Ireland, and took its name from that village. It had previously been successfully produced by Mr. W. H. Goss, of Stoke-upon-Trent. It was in 1863 that the first attempts to produce it were made at Belleek;

but they were unsuccessful until McBirney & Armstrong engaged Mr. Goss's foreman, William Bromley; a clever modeler named Gallimore, and some ten other workmen from the same factory. Gallimore subsequently returned to Mr. Goss, as did the others, after teaching their Irish friends, whilst Mr. Bromley in 1883 came to Trenton to assist Mr. J. Hart Brewer in his development of Belleek. We have several times within recent dates seen it stated that Mr. W. H. Goss, of Stoke-upon-Trent, was the originator and inventor of the Belleek ware, and generally with the assumption that the iridescent coloring was in the glaze. Both these statements are incorrect. The real inventor of these pearly lusters was a Frenchman named J. J. H. Brianchou, who protected by patent his discovery in France, England and Germany, and, I think, in one or two other countries. The English patent was dated July 8, 1857. These lusters were used both in France and Germany long before their adoption by Mr. Goss, who, in common with Belleek and other factories, imported them from France during the continuance of the patent. These lusters are solutions of metal washed over the glaze and subsequently fired, and are no more a part of the glaze than is a line of gold or other enamel-kiln decoration. Mr. Goss started in business at Stoke in 1858; and in the London exhibition of 1862 does not appear to have exhibited any "Belleek," although he had a very choice exhibit of Parian figures, vases, etc., so that at the earliest it seems reasonable to suppose he did not use these lusters before 1863, the year of the inception of the Irish manufactory. When Mr. Bromley went to Belleek he took with him the knowledge of a Parian body whose composition Mr. Goss had adopted from an older body. M 24.

BELLEVILLE, Paris. (See Jacob Petit.)

BELLEUSE-CARRIERE, a skilful modeler who was at Mintons in 1854. He attained so high a position in his art that he was placed on the Commission for the Sèvres manufactory. His charmingly conceived work was greatly admired. (See illustration to article on "Minton.")

BELLEVUE, near Toul, France. One of the few factories that successfully weathered the commercial crisis of the end of the eighteenth century. Founded by Lefrançois in 1750. In the year 1771 it passed into the hands of Bayard & Boyer, who obtained permission to call it "Manufacture royale de Bellevue." Its present director is M. Aubry, who has revived with great success the old manufacturing and decorating processes. A specialty of the manufacture of Bellevue was the making of large terra-cotta figures for the ornamentation of gardens, and which were extremely popular.

BELLEVUE POTTERY, Hull. In 1802 a partnership was executed

between James Smith and Jeremiah Smith, Hull, and Job Ridgway, Shelton, Staffordshire, for the manufacture of earthenware at Hull. The partnership only existed until 1804, Mr. Ridgway retiring. Another change took place in 1806, when the business was transferred to Job and George Ridgway, who carried it on until 1826, when they were succeeded by William Bell until 1841, when the business was closed out at auction. The wares produced consisted of blue printed and plain earthenware, green glaze, etc. Of interest to collectors of American historical pottery was a printed dinner service with a view in the center representing the "Crow Isle," a Baltic trader, successfully beating Paul Jones off the Yorkshire coast in 1779. The mark was two bells, sometimes surrounded by the inscription "Bellevue Pottery, Hull." M 25.

BELLMARK POTTERY COMPANY, Trenton, N. J. Manufacturers of sanitary ware.

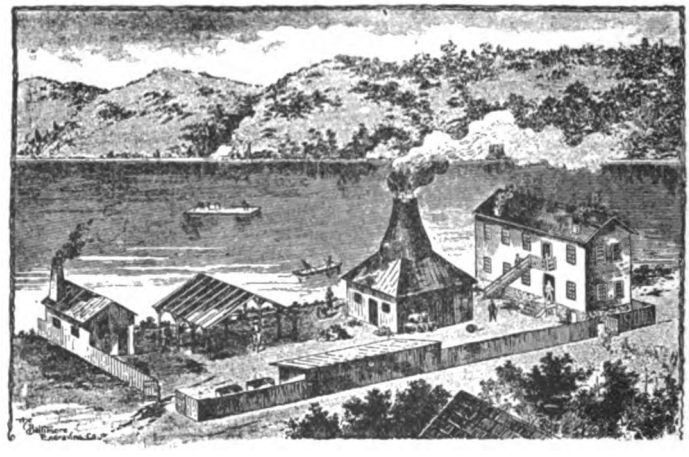
BELL WORKS, Hanley, Staffordshire. Now in the occupation of Clementson Brothers, but formerly occupied by William Ridgway.

BENEDICT BROTHERS, Mayerhofen. Manufacturers of china. Established 1884. M 26.

BENDIGO, New South Wales. Bendigo, celebrated for its gold fields, lies one hundred miles north from Melbourne. After the gold fever had somewhat abated in 1858, G. W. Guthrie, a potter bred to the work in Scotland, settled there, and commenced in a small way the manufacture of pottery. The difficulties were great, as Guthrie had not only to make pottery, but to make potters, too. But in spite of all difficulties, steady industry and enterprise triumphed, until, in 1882, the concern was sold to a company for one hundred thousand dollars, the vender still retaining an interest in it, and being afterward appointed as manager—a position he holds to-day. The principal productions are Rockingham teapots, etc., stoneware which is impervious to acids, and architectural terra-cotta works.

BENNETT, EDWIN. Mr. Bennett, a potter from Derbyshire, England, came to the United States in 1841 to join his brother James, who had erected a pottery in East Liverpool, the first one built in that city. They made yellow and Rockingham ware here. The difficulties of shipping their products and the encroachment of the river caused them in 1844 to remove to Pittsburg. Two years later Edwin Bennett withdrew from the firm, and eventually settled at Baltimore, Md., erecting there the first pottery ever built south of the Mason and Dixon line. Here he made Rockingham and yellow ware, stoneware and majolica. In the first named the well-known

Rebekah teapot was originated by him in 1851; in majolica, a large marine pitcher and a portrait bust of Washington are preserved at the works as specimens of his early production. From 1884 to 1887 both eggshell china and Parian were made. In 1890 the business was changed into a corporation, under the name of Edwin Bennett Pottery Company, and under the continued personal supervision of Mr. Bennett and the active management of Mr. Hy. Brunt much progress has been made, and in the race for supremacy which actuates American potters of to-day the firm maintains a leading position. A specialty of the factory is a combination of beautiful colored glazes which they have called "Brubensul." Rich browns, orange and crimson, with suggestions of blues and greens, are

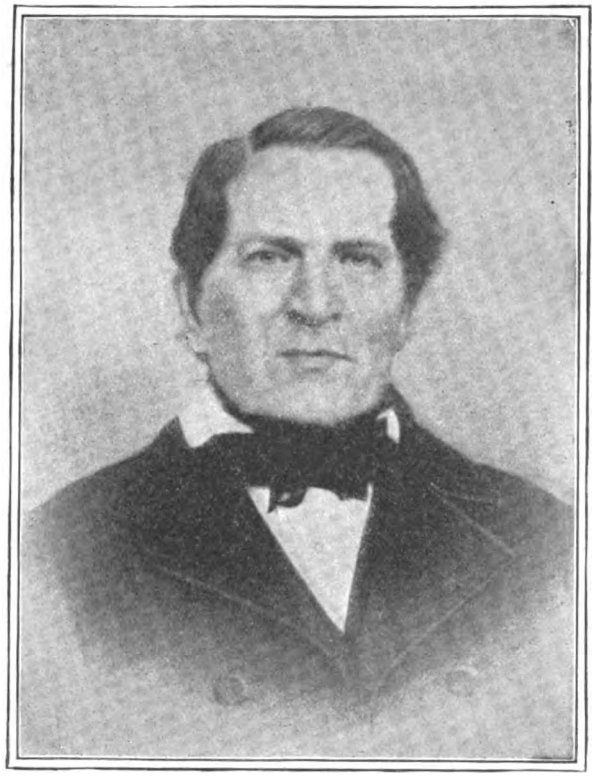


THE PIONEER POTTERY OF EAST LIVERPOOL, OHIO.

cunningly blended, suggesting without imitating the beauties of the cat's-eye and other secondary precious stones. Mr. Bennett for the past sixty years has been more closely identified with the pottery industry of America than any other living man, and is still hale and vigorous. Mr. Bennett was born March 6, 1818, now being in his eighty-fifth year. M 27.

BENNETT, JAMES, born in 1812, a potter of Woodville, Derbyshire, came to the United States in 1834, and first found employment at the Jersey City Pottery. In 1837 he was associated with the disastrous enterprise at Troy, Ind., of which James Clews was the leading spirit, and which ended in an ignominious fizzle. For one year only he remained there, and then, prospecting from Pittsburg,

Pa., built the first pottery at East Liverpool, at the foot of Second Street, Mr. Anthony Kearns furnishing the bulk of the capital. In 1844 he removed to Pittsburg, Pa., and a few years afterward the works were converted into a glass manufactory. He died July 30, 1862.



JAMES BENNETT.

BENNETT, WILLIAM, in partnership with his brothers, James and Edwin, at East Liverpool, from 1841 to 1846, and with Edwin at Baltimore from 1849 to 1856, when he withdrew on account of failing health.

BENNETT, JOHN, formerly with Doultons, Lambeth, settled in New York in 1876 as a decorator. He used the Doulton biscuit. Closed in 1882.

BENEDETTO, an Italian artist who produced at Siena some pieces of great merit. He was also probably at the head of the fabrique.

BENGRATH, OPPAL, director of Meissen Factory, 1814 to 1833.

BENNINGTON, Vermont. (See U. S. Pottery.)

BENSON. A patent was granted to him in 1726 for a new method of grinding flint-stone. Iron mortars had previously been used, and the dust produced by the pounding had been most injurious to the health of those employed. Benson's patent provided that the grinding should be done under water. Astbury immediately recognized the value of the invention and erected a mill at his own expense for grinding it in that manner, at the Ivy House, near Hanley.

BENTLEY, THOMAS, a Liverpool merchant of fine education and polished manners, taken into partnership by Josiah Wedgwood in 1766. This partnership extended only to ornamental wares. He had charge of the London showrooms, and to his genial and magnetic disposition much of the success of that part of the enterprise was due. He died in 1780.

BENTEN, the Japanese goddess of love, richly dressed, sometimes attended by fifteen boys, her children. Benten is one of the seven gods of good fortune, and is frequently depicted on pottery.

BERETTINO is a name given in Italy to a decoration chiefly used at Faenza in the first quarter of the sixteenth century. It consisted of a decoration in light blue on dark blue, or the reverse, sometimes enriched with fine arabesques traced in white. The reverse of these pieces was almost always enameled in light blue, decorated with concentric circles or spirals in a darker blue.

BERG, CORNELIUS DE, Delft. Established in 1720 at the Sign of the Star. His works, generally in blue, equal anything produced in Delft. They were charmingly conceived and very carefully executed. His mark was a star with the initials C. B., or, in the case of Oriental designs, a leaf and the initials. Aalmis, a skilful painter, was for a long time associated with Berg.

BERG, JUSTUS DE, Delft, A. D. 1729. The son and successor of above. His mark was a star and the initials I. B.

BERG, KATE DE WITT. Miss Berg had her training at the School of Industrial Art of the Pennsylvania Museum. Later she was associated with the Bennett Factory at Baltimore, and created there the Albion ware, which has attracted the attention of ceramic critics. Albion ware is so called from its being a revival of the old English slip painting. Miss Berg devoted her energies to figure and animal subjects, and a vase in the Pennsylvania Mu-

seum at Fairmount Parkis graphically painted in colored clays with an Eastern scene representing a tiger hunt.

BERGERAC, France. In 1750 there were three manufactories here, that of Jean Babut sending its products to the French colonies. The decorations were done on the glaze in the style of Strasbourg.

BERLIN. Notwithstanding the care with which the secret of the manufacture of china was guarded at Meissen, it had already been betrayed, and rival factories established at Vienna and Hochst. It was conveyed to the latter place by a workman named Ringler. His written notes were stolen from him, when in a state of intoxication, by his fellow-workmen, sold to a man named Wegley, and the establishment of the Berlin factory in 1750 was the result. It did not attain much prominence until Frederick the Great transported by force the workmen and clay from Meissen. To-day the Berlin factory produces an excellent body decorated in a lavish style, without being unduly overloaded, some of the large vases being extremely handsome. Pate-sur-Pate is also successfully made. M 28.

BERNARDO BUONTALENTI. The manufactory at Florence, Italy, where was produced the first china made in Europe, was under his direction. (See Medici.)

BERNART, JEHAN, secretary to Helene de Hangest. (See Faïence d'Oiron.)

BERNE, Switzerland. Emanuel Jean Frutting established at Berne in the second half of the last century a manufactory of faïence plaques for stoves, decorated with flowers in fresh and harmonious colors, or with landscapes in cameo blue under the glaze. These were usually marked with his initials and a date—E. J. F. 1772. Heimburg, near Thoun, in the Canton of Berne, also possessed factories of faïence decorated in a somewhat individual style that are commonly, though erroneously, designated as "faïence of Berne." Some excellent reproductions are now on the market.

BERTOLUCCI, GIUSEPPE, and FRANCESCO DI FATTORI established a fabrique at Pesaro, Italy, but it had only a short existence.

BERTRAM, BERNHARD, Luftenburg, manufacturer of majolica.

BERWICK, JOHN, one of the original potters in the Worcester Works for "carrying on the Worcester Tonquin manufacture."

BESCHE, LUCIEN. Educated in the studios of Paris, he went to England after the Franco-Prussian war, and found employment at Mintons. He stayed there but a short time, and at Copelands found a more congenial sphere for the exercise of his undoubted talent. Of great versatility, he was most successful in figure painting,

A HEAD BY BESCHE.

whether on immense friezes of tiles or delicate miniatures. His miniature portrait of the Duchess of Sutherland was admitted to the Royal Academy of Arts—a distinction but seldom, if ever before, conferred on a painting on porcelain. Mr. Besche died in 1901.

BETROTHAL DISHES. (See Amatorii.)

BEVERLY, Mass. There is a manufacture of red terra-cotta here.

BEVINGTON & Co., Swansea, England, 1817-1820. When Mr. Dillwyn gave up the Swansea Works (1817), Bevington, who had been his manager, seems to have owned a department of them. Pieces bearing the mark BEVINGTON & CO., SWANSEA, date only from 1817 to 1820, as in the latter year the works were closed, and the stock and utensils removed to Coalport by Mr. Rose, the purchaser.

BEVINGTON, Ambrose, John, James and Thomas, all potters, of Hanley, Staffordshire.

BEYERLE, JEAN LOUIS DE BARON, founder of the Niederwiller factory (1742). (See Neiderwiller.)

BEYERLE, MADAME DE. (See Neiderwiller.)

BIAGO, an Italian ceramic artist at Ferrara, A. D. 1501.

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BILLING, THOMAS, Staffordshire, was in 1722 granted a patent "for making the most refined kind of earthenware, of a nature and composition not only transparent, but so perfect of its kind as, contrary to the nature of all other earthenware, to resist almost every degree of heat."

BILLINGSLEY, WILLIAM, an artist of considerable reputation, whose flower paintings commanded much attention. His career was a varied one, being first apprenticed at the Derby Works in 1774. In 1794 or 1795 he was at the Pinxton Works, and being a practical potter as well as a painter, the fame of that establishment owes much to him, as is evidenced from the fact that after leaving there in 1800 the body of the Pinxton porcelain considerably deteriorated, the decorations also becoming cruder and more roughly drawn. In 1808 he was at the Worcester Works, but only remained there till 1813, when, in conjunction with George Walker, he established a small china works at Nantgarw, nine miles from Cardiff, where they made a soft and very beautiful translucent porcelain. An effort was made to remove the small Nantgarw Works to the Cambrian Pottery at Swansea, and china identical with that of Nantgarw was made there from 1814 to 1817; but the matter was never fully completed, and in 1820 both works were bought by Rose, of Coalport. Billingsley then went to Coalport and worked there until his death in 1828. He was familiarly known by the diminutive of "Beely." (See also Nantgarw, Pinxton and Swansea.)

From the Keramic Studio.

THE DANAIDES.
BY MISS HAHN JANSEN.

BING & GRONDAHL, Copenhagen. Founded 1853. Since the inception of M. Willumsen, in 1897, as art director, the products of this firm have made a very great advance, and they are char-

acterized by force, decision and energy. Their exhibit at the Paris Exposition attracted considerable attention and included a finely modeled figure of "Civilization"; a series of vases decorated with interlaced foliage and flowers in high relief; vases by Hollin with glaze crystallizations in which rose tone predominated, and vases with enamel in high relief by M. Elias Patersen. Mr. Louis F. Day writes: "They have succeeded in getting rather warmer tones in their ware; they arrive at quite an anemone pink, and their landscapes are at times suffused with a rosy glow new in hard paste underglaze porcelain painting. They make also rather noticeable use of green." Nor should notice be omitted of some very charmingly modeled animal subjects.

Courtesy of the Keramic Studio.

BY MR. H. KOFOED.

BINGHAM, EDWARD, Hedingham Ware Art Pottery, Castle Hedingham, Essex. M 28a.

BINGLEY, THOS., & Co., proprietors of the Rockingham Pottery, 1788. It first acquired a reputation under their management. (See Rockingham.)

BINNS, CHARLES FERGUS, Director of the New York State School of Clayworking and Ceramics, is the son of a notable potter, the late Richard William Binns, of Worcester, England, for forty-five years managing director of the Worcester Royal Porcelain Works. He was born in 1857 at Worcester, England, and was educated at the Cathedral King's School in that city. At an early age he entered the porcelain works with the view of learning the whole business.

There being no chemical laboratory in Worcester at that time, regular visits were made to the neighboring town of Birmingham for the practice of analytical chemistry, while drawing and applied design were studied at the Worcester School of Art. Mr. Binns realized early in his career the many-sidedness of an education in ceramics, and it was not long before occasion arose for acquiring some knowledge of photography, lithography, electricity and other branches of technical and physical science. For some years the preparation of colors occupied a large portion of his time, and this was succeeded by the supervision of several branches of decorative work. In 1885 the London sales depôt was in need of a head, and the position was offered to and accepted by the subject of this sketch. While in London Mr. Binns lost no opportunity of study. The wealth of the museums was open to him, and he made a point of becoming acquainted with those in charge of the ceramic collections. In this manner he was able to enlarge his knowledge by consultation with the late Sir Wollaston Franks, Mr. Charles H. Read, Mr. C. Purdon Clarke, Mr. F. W. Rudler and others. During this period Mr. Binns began the collection of his series of stereopticon views of pottery, probably the finest set of ceramic photographs in this country. In 1894 a call came to return to the manufactory at Worcester and to take charge of the manufacture of the clay wares. The preparation of clay and glaze, the firing of kilns and the correction of manufacturing faults offered a wide field of work which was sustained until March, 1897, when a connection which had endured for nearly twenty-five years was severed. Coming to America in the fall of 1897, Mr. Binns was at once invited to take charge of the Technical and Art School at Trenton, N. J. This position was held for two years, when an invitation was tendered and accepted to the directorship of the New York State School at Alfred, N. Y. In 1899 Mr. Binns joined the small band of enthusiastic ceramists who were founding the American Ceramic Society, thus becoming one of the charter members. In 1900 he was elected vice-president and in 1901 president of the society. He is the author of "The Story of the Potter," "Ceramic Technology" and numerous articles on the history, science and art of his special subject.

BINNS, R. W., F. S. A. Mr. Binns' association with Worcester dates from 1862, when he and Mr. W. H. Kerr conducted the business under the style of Kerr & Binns. In 1862 a joint stock company was formed, and the distinction was conferred upon Mr. Binns of making him art director—an onerous position, considering the traditions of the house—but which he has worthily filled. To his

skill and enterprise much that upheld Worcester supremacy was due. The enamels of Mr. Bott in the style of Limoges (see Bott), but on a pure porcelain body; that wonderful ivory porcelain, which has perhaps been more widely imitated than any other kind of pottery; jeweled porcelain, richer and better than that of Sèvres, insomuch that each jewel is formed of color and melted on to china, instead of being cemented on, as at Sèvres, are but a few examples, which could easily be multiplied. Notwithstanding his many duties at the factory, Mr. Binns has enriched ceramic literature with several notable works, the most important of which was published in 1877 with the title, "A Century of Potting in the City of Worcester." Though retaining a seat upon the board of directors, Mr. Binns retired from his position at the end of June, 1897, and upon that occasion was presented by the workpeople with a handsomely illuminated address. An accomplished scholar and potter, Mr. Binns will always be regarded as one of the first ceramists that England has ever produced.

BIRD, DANIEL, Stoke-upon-Trent, England. He was called the "Flint Potter," through his having ascertained the exact proportion of flint and clay required in order to prevent crazing. He was succeeded by T. Mayer.

BISCUIT, a term applied to ware after it has been first fired, and prior to glazing.

BISCUIT OVEN, or kiln, an oven for firing pottery in the clay state. It is built of red brick and lined with firebrick, and is usually about sixteen feet inside diameter, and sixteen feet to the roof or crown, above which the oven rises to a sufficient height to give draught to the fires. Around the base are ten or twelve furnace openings which connect with the flues built under the floor and around the walls of the oven. The ware is arranged in saggers (which see), which are arranged in "bungs" until the oven is filled. The firing then commences and lasts about forty-eight hours, and a heat of about 3,000° Fahrenheit is reached. The fires are allowed to die away, and after cooling for about three days the ware is taken out.

BISHAMON, one of the Japanese gods of good fortune. Bishamon is frequently depicted on porcelain. He is the god of military glory, is dressed as a warrior holding a spear and a small pagoda.

BISHOP & STONIER, Hanley, Staffordshire. Originally Livesley, Powell & Co., who were succeeded in 1865 by Powell and Bishop. Later Mr. John Stonier, a china dealer of Liverpool, was admitted as a partner, and the firm became Bishop & Stonier. They make a good grade of decorated earthenware and operate three works—the

Stafford Street Works, formerly Reuben Johnson & Co.; the Church Street Works, formerly William Ridgway, and the Waterloo Works. M 29.

BIS-JA-MOU. The Japanese god of glory, which frequently figures on Japanese ceramics.

BISSEN, pupil and successor of the noted sculptor Thorwaldsen, some of whose statuettes and bas-reliefs have been reproduced in biscuit china.

BIZEN WARE. Japanese. It is supposed that from B. C. 97-30 a kind of earthenware was made in the Province of Bizen, the ware now produced preserving the shapes of the vases used for religious purposes at a remote period. A large kiln founded in 1390 still exists in Imbe-mura where six families are pursuing the trade., The manufacture of stoneware, which is continued up to the present time, was commenced in 1210.

BLACK WARE. Black ware for domestic purposes was in the seventeenth and eighteenth centuries much esteemed in England, and the manufacture was continually improved, reaching a high state of perfection at the hands of Wedgwood. To-day, jet, as it is now termed, is restricted almost entirely to teapots, many manufactories being devoted entirely to its production. (See Egyptian Black.)

BLATERAN, FRANCOISE, a woman who operated a pottery at Lyons about 1750.

BLOIS, France. M. Elysse produces here excellent reproductions of the old Italian styles of the fifteenth and sixteenth centuries.

BLOOR, OTT & BOOTH, Trenton, N. J. Founders of the Etruria Works, where later Ott & Brewer attained some notable successes. (See Ott & Brewer.)

BLOOR, ROBERT, proprietor of the Derby China Works from 1815 to 1849. (See Derby.)

BLOOR, Trenton, N. J. Joined the firm of Taylor & Speeler in

1854, and retired in 1859. This was the pioneer pottery firm of Trenton.

BLUE OF THE SKY AFTER RAIN. The azure blue of the Chinese, made about A. D. 945, and also known as Tch'ai. Fragments of it are as highly esteemed by the Chinese as jewels.

BLUNGER. The component parts of the paste or body are placed in a circular tank called a blunger. In the center of this is an upright shaft with a number of arms kept constantly revolving until the whole mass is perfectly amalgamated and reduced to the consistency of cream.

BOCCAROS. (See Buccaros.)

BOCCHI, BENEDETTO, an artist at Caffagiolo of the period of A. D. 1640.

BOCCALERI, a guild of Venice, which in 1644, according to Sir William Drake, prepared a petition in which reference is made to previous decrees in its favor issued in the years 1455, 1472 and 1518, prohibiting the importation of foreign earthenware, and a decree of the Senate in 1665 prohibiting the importation or sale in Venice of any sort of foreign earthenware by any person not being a member of the guild. From the general tenor of the petition it is reasonable to infer that the potter's art in Venice was reduced to the production of very ordinary wares, as an exception was made to the majolica of Valencia, which at that time had greatly deteriorated.

BOCH FRÈRES, La Louverie, Belgium. Manufacturers of earthenware, whose reproductions of Delft and Rhodian pieces are very successful. M 30.

BOCH, François, Jean François, Dominique, Pierre Joseph. (See Audun le Tiche.)

BOCH, N. W. (See American Porcelain Works.)

BODENBACH, Austria. Messrs. Schillers & Sons and several other manufacturers of majolica are situated here.

BODLEY, E. F., & Co., Burslem, Staffordshire, were manufacturers of earthenware. They supplied the service for the Confederate steamer "Alabama." They went out of business prior to 1901. M 31.

BODLEY, E. J., New Bridge Pottery, Longport, manufacturer of earthenware. Succeeded by Dunn, Bennett & Co. M 32.

BODLEY, E. J. D., Hanley, Staffordshire. Manufacturer of china. Not now in business. M 33.

BOENDER, MATHIJAS, a potter of Delft, established in A. D. 1713, at the sign of the "Four Heroes of Rome." His rather rare products are generally decorated in blue and marked MB.

BOGAERT, MATHEUS VAN DEN, potter of Delft, established 1714, first at the sign of "The Flower Pot"; later at that of "The Two Savages" and of "The Stag." The mark was M. V. B.

BOHN, ERNST, Rudolstadt. Established 1854. China.

BOILEAU, director of the Sèvres manufactory from 1759 to 1773. So skilfully and devotedly had he managed it that he left in the coffer of the manufactory the sum of 300,000 livres, and goods and book debts for an equal amount. In 1768 the kaolin deposits of St. Yrieix were discovered, the manufactory thus reaching its most ambitious aims.

BOIS-LE-COMPTE, France. A document in the archives of Sèvres states that there was a manufactory of faïence here in 1768.

BOISETTE, or BOISSELLE-LE-ROY, France. A faïence manufactory was established here in 1733. It was purchased in 1777 by Vermonet, father and son, who set up ovens for hard porcelain. Although in existence for forty years, comparatively little is known of the production. A few specimens decorated with bouquets of flowers and marked with a cursive B, followed by two dots, are known.

BOISSIMON, DES M., Langleais, France. Reproductions of Beauvais stoneware.

BOLOGNA, Italy, is referred to by Piccolpassa, but the products are unknown. In recent years (1870) good copies of Della Robbia's works were made there.

BONE ASH, a most important part of all English china, is prepared by burning bones in contact with the air. It contains eighty-three parts phosphate of lime, twelve carbonate of lime, and one of fluoride of calcium. Bone ash gives whiteness and translucency. As to the action of bones, Mr. L. Arnoux remarks that when the other materials begin to combine at a certain heat, the bones, being phosphate of lime, which cannot be decomposed by the silica, melt, without combining, into a sort of semi-transparent enamel, and being intimately mixed in the mass give transparency in proportion to the quantity used. Most writers have given credit to the second Josiah Spode as the first to use bones in making china. He did not, however, begin to make china until after his father's death in 1797, while bones had been used at Bow, Chelsea, Worcester, etc., thirty or forty years previously. Pennington, of Liverpool, in 1769, in a recipe for a china body, used one-third portion of bone ash. In 1748, in the second patent taken out by T. Frye, unaker is replaced by two parts of virgin earth produced by the calcination of certain animals, vegetables and fossils. There is no difficulty in identifying this with calcined bones, and analyses of Bow, Chelsea and Worcester

have fully proved the point. The honors, therefore, appear to be with the Bow Works. That bone ash was in general use thirty-nine years before Spode began to make china is proved by a recipe printed in 1758 in "The Handmaid of the Arts," in which calcined bones are clearly specified.

When First Used in Earthenware.—Under date of September 26, 1826, Enoch Wood, the old Burslem potter, writes: "I was the first person that made use of bone in earthenware, when in my apprenticeship at Mr. Palmer's, at Hanley Green."

BONE, HENRY, the celebrated enameler, who became a Royal Academician in 1811, was apprenticed to Richard Champion, of Bristol, in 1772.

BOOTE, T. & R., Burslem, Staffordshire, England, manufacturers of earthenware. The works were founded at the end of the last century by Walter Daniel, who was succeeded by Timothy and John Lockett. In 1809 Joseph Machin and Jacob Baggaley were the proprietors, Joseph Machin giving place to William Machin in 1831. Later they were succeeded by Richard Daniel and Thomas Edwards, and in 1850 the works passed into the hands of the present proprietors. Messrs. Boote owned and worked a number of valuable patents, among which may be mentioned the process of making encaustic tiles from dust by hydraulic pressure, and what was termed the Mosaic process, in which the pattern was let in the clay, giving the effect of bas-relief without being raised. This was principally applied to ornamental goods. A large Parian vase having raised flower work, exhibited by them in 1851 in the Museum of Practical Geology, shows that they were among the early manufacturers of Parian. They have always been notably progressive, their printed decorations on semi-porcelain being highly esteemed at the present day. M 34

BOOTH, E., Staffordshire, England, is credited with having first practiced the dipping of the ware into an improved glaze kept in suspension in water. Shaw also states that he began the practice of firing his ware before dipping it, though firing in biscuit had long been practiced by all the makers of Delft ware.

BOOTH, THOMAS, one of the original proprietors of the Etruria Pottery Works at Trenton, N. J., 1863. Mr. Booth is the only surviving member of the original firm.

BOOTH, TAYLOR, a painter brought up by Enoch Wood, and afterwards with the Derby China Works. From there he went to the Don Works, Swinton. It was he who painted the Gibbet jug

mentioned under the head of "Don Pottery." Mr. Jewett describes it as "beautifully painted, with groups of flowers on either side."

BOOTHS, Church Bank Works, Tunstall. This manufactory passed into the hands of T. Booth & Son in 1870, they having been previously established at the Knowles Works (1864) under the style of Evans & Booth. In 1868 the style was changed to Thos. Booth & Co., and in 1872 to T. G. & F. Booth. It is now conducted by the former alone under the style of "Booths." During recent years very decided improvements have been made both in shapes and decorations, and they are one of the most enterprising and progressive of the Staffordshire earthenware manufacturers. M 35.

BORDEAUX. In 1714 Jacques Husten founded a faïence works here. In 1719 a remission of all taxes was granted to him by order of the Council, and though in 1729 it had acquired sufficient importance to be designated as a Royal manufactory, a prorogation of the order was refused him in 1750. Considering the importance of the factory, it is a singular fact that but little is known of its products. In 1783 Bordeaux had six and in 1791 eight workshops producing pottery. A china manufactory was established here about 1770. The mark was the word "Bordeaux" in a half-circle in stencil. M 36. The modern factory of Messrs. Vieillard, situated on the Bacalan Quay overlooking the Garonne, and one of the best known factories in France, was closed by order of the *Comptoir Ceramique*, which controls the output of French earthenware. Two of Vieillard's employees, Messrs. J. & F. Bourdaleix, interested sufficient capital to build a new factory, and white and decorated earthenware is made there, the employees being principally workmen from the old factory. The style of the firm is "Faïencerie Bordelaise."

BORDOLLO BROTHERS, Grunstadt. Manufacturers of china. Established 1818.

BORELLI. There were several potters of this name of a family originally from Savona, where they had a factory at the beginning of the eighteenth century. Jacques Borelli worked at Moustiers and at Marseilles, and possibly directed a factory there.

BORGO, SAN-SEPOLCRO. There was a faïence factory here in 1771, an example of which in the form of a lamp painted with garlands of flowers in colors is in the South Kensington Museum.

BORNE, CLAUDE, an artist at Rouen, 1736. In 1751 he was at Sinceny, at Tournay in 1753, and later at Mons.

BORNE, ETIENNE and HENRY, painters at Rouen in 1689.

BORNIER, JACQUES, founded a pottery at La Rochelle, which continued until 1735. It was revived in 1743 by Jean Bricqueville.

BOTEGA, or BOOTEGA, an Italian word signifying something between a workshop and an artist's studio, and for which there is no English equivalent.

BOTT. In 1854 Mr. Binns, of the Royal Worcester Porcelain Works, was enabled to display specimens of the enamels for the execution of which Mr. Bott, an artist of the very highest eminence, had been trained to produce. These enamels, unlike those of Limoges, are pure porcelain. The tone produced is peculiarly soft and delicate, the colors pure and intense, and they will bear comparison with those of the fifteenth and sixteenth centuries. The early death of Mr. Bott prevented a continuance of their production, and what few specimens exist are extremely valuable, a pair of moderate sized vases being valued at $8,000.

BOTT ENAMEL.

BOTT & CO. were potters in Staffordshire towards the end of the eighteenth century.

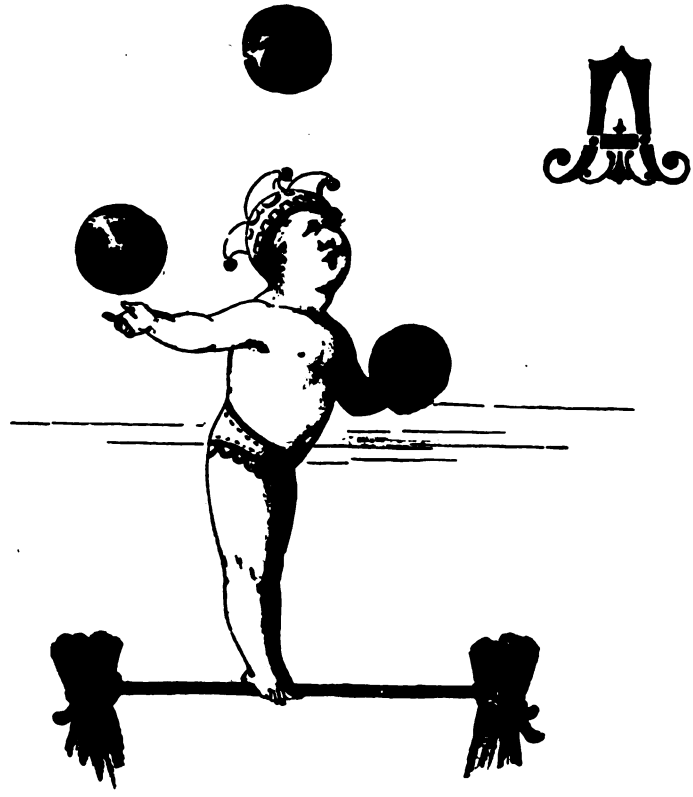
BOTTGER, JOHN FREDERICK, or BOTTCHER, was born in 1681 or 1682 at Schleiz, in the territory of the Reuss. Apprenticed to an apothecary in Berlin, he fell under suspicion as an alchemist and sought refuge in Saxony, which was then under the electorate of Augustus II. Here he was encouraged in his experiments, but his non-success exhausted the patience of the king, who consented to a request of the Count of Tschirnhausen, who wished to avail himself of the knowledge he believed him to possess for experimenting in clays, with a view to making porcelain. From 1701 to 1709 he worked for his patron and succeeded in producing a stoneware of superior quality and a red ware so hard that it could be cut only

by a lapidary's wheel. But porcelain seemed as far off as ever, until in 1710 a circumstance of which he was quick to take advantage resulted in the discovery of a bed of fine kaolin. John Schnorr, a wealthy ironfounder, riding one day in the vicinity of Aue, near Schneeberg, Saxony, noticed some white and peculiarly adhesive clay. Schnorr, though rich, was avaricious, and thinking it might be used in place of the expensive hair-powder, took some with him and used it for this purpose. Later it reached Bottger, and he, quickly recognizing that it was a finely powdered clay, immediately procured a supply, and from his experiments soon found that he had the material for making a true porcelain. The clay was dug up and packed in sealed bags and transported with the utmost secrecy to the castle at Meissen, which the king had caused to be transformed into a pottery. Every precaution was taken to preserve the secret. Armed guards patrolled before its doors; everywhere were reminders of absolute silence; oaths of secrecy were administered each day to the workmen; the king himself took it when he visited the castle, and Bottger was virtually a prisoner. And here, guarded by portcullis and moat, by high walls and armed sentries, the first hard porcelain ever made in Europe had its birth. Bottger for nine years endured this life, spending in riotous living the large sums showered upon him; but the confinement under such circumstances probably shortened his life, and he died March 13, 1719.

BOUCHER, a celebrated French artist, who supplied the Sèvres manufactory A. D. 1750-1800 with designs for figures and groups which were modeled by clever sculptors and executed in biscuit.

BOULLEMIER, ANTONIN. Born 1840 at Sèvres, France; died at Stoke-upon-Trent, April 25, 1900. His father was a prominent decorator at Sèvres. Antonin studied under Fragonand and later was employed by M. Deyfus, a well-known ceramic artist of Paris. His undoubted talent quickly showed itself, and when after the Franco-Prussian War he went to England (1871) he was immediately engaged by Mintons, for whom he continued to work until his death. Extremely delicate in execution, his paintings were justly admired, whilst more ambitious and original designs manifested not only a complete mastery of technique, but a poetical imagination and absolute precision in drawing. To give his creative power more scope M. Boullemier established an independent studio and was the recipient of many commissions. Messrs. Brown-Westhead's exhibit at the Chicago Exhibition was considerably enriched by his assistance. He was also an accomplished musician

and an amateur actor of no mean ability. The illustration, which has lost much in reproduction from a water-color, was an original design for an alphabet plate, but the series was never carried out.



BOULTON, MACHIN & TENNANT, Burslem. Earthenware. M 37.

BOURG-LA-REINE, a manufactory of soft porcelain that was discontinued in 1773, when it was united with that of Mennecy, and faïence was manufactured exclusively. It was at Bourg-la-Reine that Messrs. Chaplet, La Fonde & Laurin first made those beautiful pieces that were afterwards called barbotine. M. Laurin alone now carries out the process there, the other two partners having joined Havilands in their manufacture of it.

BOURGOUIN, manufacturer of faïence, Renneo, whose shapes appear to have been made from casts of goldsmiths' works. They are covered with a white and very pure enamel, and the decorations are carefully executed.

BOURNE, BAKER & BOURNE were manufacturing earthenware at the Fountain Square Works at the end of the eighteenth century, and were one of the first firms in the Potteries to introduce printing. They were succeeded by Baker & Co., who in turn gave place to Mr. Edward Challinor, though the style of the firm was not changed. Mr. Joseph Gimson, one of the best-known men in Fenton, who died in 1900, aged eighty-two, was connected with the firm since 1836.

BOURNE, E. J., and J. E. LEIGH, Burslem. Earthenware manufacturers. Formerly Blackhurst & Bourne. M 38.

BOURNE, JOSEPH, & SON, Denby Pottery, near Derby. Established by Joseph Bourne in 1808, the present name being first used about fifty years ago. In 1834 the firm took out a patent for special kilns for producing salt glaze ware, and as this was highly vitreous it soon brought the firm the repute they still maintain. In addition to the usual products, it was found the body was equally adapted for telegraph insulators, and they were adopted for use by the English Government. Within the last twenty-five years the firm introduced what is more generally known as Bristol ware, a light stoneware in which ink-bottles and, indeed, all shapes are now as generally made as they are in the salt glaze ware. In the Maddocks Collection are two stoneware flasks, one a half-length figure of Lord Brougham in wig and gown, holding a scroll on which are incised the words, "The Second Magna Charta," and underneath "Brougham's Reform Cordial." It is marked at the back:

BELPA & DENBY
BOURNE'S
POTTERIES
DERBYSHIRE

The other is a half-length figure of Queen Victoria, or, as she is termed on the back, "Queen Alexandrina Victoria." The name Victoria is on her waistband and on a scroll in her hand are the words: "May peace and prosperity prevail." They are of the ordinary yellow stoneware, with brown glaze on the top half. The mark on this varies a little and is as shown here. The adaptation of the figures to the required purpose is very ingenious. The Brougham flask was made in 1832, the Queen Victoria in 1837.

DENBY & SODNER PARK
BOURNE'S
POTTERIES
DERBYSHIRE

BOUSSEMAERT, FRANCOIS, Lille. (See Lille and Belgium.)

BOUTET, CLAUDE. (See Auxerre.)

BOW. The early history of this celebrated factory is unknown. In 1744 Edward Heylyn, a merchant of Bow, and Thomas Frye, of

West Ham, Essex, took out a patent for the production of porcelain, one of the ingredients of which was "an earth, the produce of the Cherokee nation in America, called by the natives *unaker*." This patent probably led to the inception of the Bow Works, for we find Frye manager of the works from 1750 for the earliest known proprietors, Weatherby and John Crowther. Frye continued as manager until 1759, when he resigned on account of ill-health, and he

BOW WARE AND MARKS.

died in 1762, as did also Weatherby. The following year Crowther became bankrupt; his stock was sold in 1764, and in 1776 the works were purchased by Wm. Duesbury, of Derby, who removed the engravings, molds, etc., to Derby. The Bow Works were called "New Canton," and according to a statement made by Thomas Craft, a Bow painter, were copied from those at Canton, in China, and gave employment to about 300 persons. In the second patent taken out by Thomas Frye, dated November 17, 1748, the *unaker* is replaced by other materials, and, as we have seen in the article on "Bone-Ash," calcined bones entered largely into the composition of the paste, and a distinctly original body was the result. It eventually became national in character, so that the terms "English china" and "bone china" are synonymous. Explorations on the site of the old factory, made in 1868, did much to clear up much that had been uncertain as to Bow china, and to assign positively to Bow wares hitherto ascribed to other factories. Many forms and decorations are common to both Bow and Chelsea, the marks, too, having been used almost indiscriminately. The body was of unusual thickness, and, where the transmitted light appears, somewhat yellowish, the glaze nearly white, verging to a faint straw color, and contains much lead.

Printing was early used at Bow. Embossed patterns such as the Mayflower were popular. Vases and statuettes were enriched with flowers in relief, often delicately tinted. Of the Bow marks the commonest is the anchor and dagger in red (A); an arrow with an amulet on the shaft (B); and—without question a Bow mark—the initials of Thomas Frye (C).

BOWES, JAMES L., joint author with Audsley of an elaborate and charming work entitled "Ceramic Art of Japan."

BOYLE, JOHN, Stoke-upon-Trent, was a partner with Herbert Minton from 1831 to 1836, under the style of Minton & Boyle. He was afterward a partner in the house of Wedgwood.

BOYLE, ZACHARY, & SON were potters at Stoke-upon-Trent in 1829, at the Glebe Street Works, formerly owned by Adams, and later used as a tile works by Minton, Hollins & Co.

BRA, EUSTACHE MARIE JOSEPH, a sculptor and modeler born at Douai, France, May 22, 1772, and died at Choisy le Roi, December 14, 1840. After several years' practice at Douai, Bra was associated with the pottery at Choisy le Roi. Later, accompanied by a certain number of workmen, he went to Creil, where he executed a great number of pieces, most of them really remarkable creations. Some busts in biscuit carry his signature—"Bra."

BRACQUEMOND, M. and MME., artists engaged by Havilands in the decoration of faïence. The large tile piece in the Smithsonian Institute at Washington, D. C., representing Human Progress, is by M. Bracquemond. He is an artist gifted with great originality and versatility.

BRADLEY, SAMUEL, one of the fifteen original partners in the Worcester Works (1751).

BRADSHAW CHINA COMPANY, Niles, O. Erected in 1900, and producing a fair quality of earthenware. The decorating department is in the hands of W. Silverman. The officers of the company are: T. R. Bradshaw, manager and president; A. C. Bradshaw, assistant manager; J. D. Walkins, secretary. M 38a.

BRADSHAW, E. B., T. R., and IRA O., were among the original partners in the West End Pottery Company, East Liverpool, Ohio, but none of them are now connected with it.

BRADWELL WOOD. Midway between Wolstanton and Burslem, and the site of the Elers Brothers' factory. (See Elers.)

BRAMELD, JOHN and WILLIAM. (See Swinton Works, Rotherham.)

BRAMPTON, Derbyshire. For the last two centuries works have existed here for the manufacture of brown and stone ware. At the

early part of the present century there were six factories, and some of them are still worked by the same families. Posset pots, puzzle jugs, and jugs with grayhound handles were largely made.

BRANCAS, LAURAGUAIS, COUNT DE. Probably the credit of the discovery and utilization of kaolin in France belongs to him, as he discovered it in the neighborhood of Alençon about 1758. A medallion by him is dated October, 1764. He worked at Sèvres, and probably at Chelsea during his sojourn in England. While there he took out a patent for hard or natural china June 10, 1766, anticipating Cookworthy's patent by nearly two years. Horace Walpole possessed a porcelain reproduction by him of the Bacchus of Michael Angelo. There are other specimens at Rouen, Sèvres, and three specimens were destroyed by fire in the Alexander Palace loan collection. They were marked with a cursive B and L, conjoined, and showed to what a high degree of excellence the Count had carried his invention.

BRANDEIS, the associate of Hartog at Amsterdam (1780-85). (See Amsterdam.)

BRANDENBURG, Germany. Hard paste china was made here from 1719 to 1729.

BRANNUM, CHARLES H., Barnstaple, Devon. Barnstaple redivivus! The manufacture of pottery, it is said, has been traced back some 1,500 years to the Roman period, when the town was known as Artavia. There is also proof of its continuous manufacture there since the middle of the fourteenth century, though in its more beautiful and artistic forms it had become a dead letter until revived by Mr. Brannum. A piece of ware made from the same clay as he now uses came to light during some excavations, bearing the date 1708. The factory has been worked by the Brannums for the last fifty-five years, the present proprietor being responsible for its management for over twenty years, during which time the Royal Barum ware, as it is called, has been evolved. To him, therefore, and to his untiring energy is due the conversion of a manufacture of such prosaic things as roof-tiles and drain-pipes into one of fine art, which has been sealed with the approval of such eminent authorities as Professor Church and others. The fine red Devon clay is covered with an engobe and decorated in Sgraffiato or painted in slips, or sometimes a combination of both is happily used. Another

A BARUM MUG.

style depends for its effects on a colored glaze, rich greens, blues, yellows and neutral tints of such richness as to at once claim attention. A deep blue glaze and a combination of greens and browns are especially attractive. The shapes are usually good, and graceful in outline. Some few grotesques, whilst quaint and original, do not seem to us in keeping with the serious object of Mr. Brannum, and we confess to a feeling of disappointment in the bird jugs designed by the well-known caricaturist, Mr. F. C. Gould, of the *Westminster Gazette*, one of which, the "Eared Grebe," we illustrate. The large Barum bowl presented by Barumites at home to their fellow-townsmen in London, in a delightful blue glaze with representations of the Guildhall and Queen Anne's Walk at Barnstaple, is a fine specimen of artistic pottery and well worthy of the little factory at Barnstaple.

A BARUM JUG.

BRAZIL. The pottery of Brazil calls for only passing notice. The best is an unglazed terra-cotta, Greek both in form and decoration. Brazilian forms are made in red clay with a light brown clay decoration, or with the clays reversed.

BREARLEY, CHARLES, Trenton, N. J., first president of the Greenwood Pottery Company, 1863.

BREBER & LIEBMANN, Schney, near Lichtenfeld. Established in 1780. Reproductions of antiques and Oriental wares. M 39.

BRETBY ART POTTERY. Finely modeled and quaintly designed pottery, mostly in colored glazes, manufactured by Tooth & Co. at Woodville, near Burton-upon-Trent, England.

BREWER, JOHN HART, Trenton. (See Ott & Brewer.)

BREWER POTTERY COMPANY, Tiffin, Ohio. A sanitary ware pottery, now in a receiver's hands.

BRIANCHON, J. J. HENRI, the inventor of the pearly lusters used in decorating Belleek (which see).

BRICHARD, ELOI, director at Vincennes, A. D. 1753.

BRIDGWOOD, S., & SONS, Longton, Staffordshire. Manufacturers of earthenware and china. M 40.

BRIEL, PIETER VAN DEN, a potter of Delft at the sign of La Fortune. His products soon became known and sought for on

account of their worth and beauty. They are variously marked, sometimes with his initials PVDB; sometimes with "I. H. F."—In Het Fortium (to fortune). His widow, who succeeded him, marked Wv. D. B.

BRINDLEY, JOHN, Longport, formerly occupied the works taken by W. Davenport & Co.

BRIOT, FRANCOIS. We frequently come across newspaper and magazine paragraphs, referring to the pottery of Briot, of which the following is a sample: "One of my new customers came to me one day with a little dish. She told me she had picked it up in the shop of a Parisian antiquary, who had asked her a good price for it, affirming that it was a genuine example of the pottery of the renowned François Briot. Now it seems that she had since been able to compare her prize with other things by Briot and had come to the sensible conclusion that she had been imposed on. So she had, in so far as the dish being a Briot was concerned; but she had cause to rejoice when I proved beyond a doubt—and my opinion has been sustained by other experts—that it was a genuine piece of Palissy ware, and therefore an invaluable acquisition. You see, Palissy is known to have imitated the wares of this François Briot, although just why is not certain, for his own inventions were great accomplishments." Briot was a Swiss and a worker in pewter, not pottery. Some of his fine pewter dishes were reproduced in pottery, being molded direct therefrom, and as a consequence his initials are reproduced along with the design. They have been ascribed to Palissy, we think in error, from the man's general character. Be this as it may, these dishes are highly prized.

BRISLINGTON, four miles from Bristol, England. Richard Frank and his son made here a luster ware, usually in small pieces, and very poorly painted. The luster, produced by copper and its sub-oxide, was very brilliant, but the glaze was thin and uneven. The works were closed in 1789.

BRISTOL, England. There were two manufacturers of delft at Bristol in the eighteenth century—Richard Frank and Joseph Flower. Frank was succeeded by Joseph Ring in 1786, and he engaged a potter from Shelton, Staffordshire, named Anthony Hassel, who initiated at Bristol the manufacture of earthenware, with which Brisol delft became a thing of the past, it never having attained to a high perfection, the glaze being far from bright, and the colors dull. (See also Richard Champion.) The first mark (M 41) is the earliest dated example of Bristol delft. The third occurs on a high-heeled shoe, and the others on various delft pieces. There is still a

considerable pottery trade carried on at Bristol, mostly in stoneware, Poultney & Co. make jet and earthenware, and Price, Sons & Co. carry on the old stoneware pottery.

BRISTOL DELFT PLATE.

BRIZAMBOURG (Charente Inferieure, France). There was here at the beginning of the seventeenth century a faïence factory founded under the patronage of Henri IV., but the products are unknown.

BROCKMAN POTTERY COMPANY, Cincinnati, Ohio. Founded in 1862 by Tempest, Brockman & Co., who were succeeded in 1877 by the present firm. White granite and cream color only are made.

BRODRIBB, JOHN and RICHARD. Original partners in the Worcester Porcelain Company. A. D. 1751.

BROMLEY, WILLIAM, foreman to W. H. Goss, Stoke-upon-Trent, who went to Belleek to McBirney & Armstrong's, and placed the manufacture of Belleek on a successful basis. In 1883 he came to Trenton to assist Mr. Hart Brewer in his development of Belleek, and later associated himself with Messrs. Willets for the same purpose.

BRONGNIART, ALEXANDRE, one of the most illustrious names connected with ceramic art. Never working or thinking for mere personal aggrandizement, the whole strength of his vigorous nature was devoted to the advancement of his art and the honor of his country. Appointed to the directorship of Sèvres in the year 1800, when owing to political troubles its financial affairs were at very low ebb, he brought to bear such a combination of forces that in the short space of four years the manufactory became self-supporting. It then became the property of the Emperor, who provided the funds for its management by yearly subsidies. To effect this had required

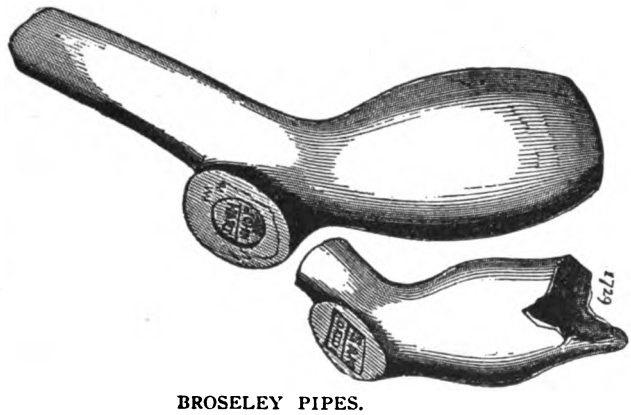
the most careful management. Extravagances which had been rampant were ruthlessly curtailed, and to set an example of economy he himself accepted 3,000 instead of 6,000 francs, the amount fixed for his salary. His father, a skilful architect, and some other generous and patriotic artists, gratuitously furnished new models in accord with the then prevailing taste, and it was not long, under Brongniart's illustrious management, before Sèvres became, not the plaything of the reigning prince, but a public benefaction, setting an example to and encouraging private enterprises, instead of competing with them. An instance of this may be quoted. The beautiful manufactures of Rouen and its school had been destroyed by the increased production of china in France, and by the treaty of 1786 with England, which admitted English earthenware at the low duty of 12½ per cent. Many English potters migrated to France, founded manufactories and introduced the English method of decoration. The productions at the outset were sufficiently good, but to meet competition no care was taken in the manufacture; they were insufficiently fired, the glaze was soft and was scratched by the slightest touch, and the whole of the production was so defective and coarse that the industry was threatened with extinction. M. de St. Amans, who had in England gained a thorough knowledge of the manufacture in all its details, undertook to save the industry from ruin. M. Brongniart did all in his power to assist M. de St. Amans, and placed at his disposal the ovens and the whole resources of Sèvres, so that in a short time the manufacture was resumed with increased and growing success. In 1823 M. Brongniart organized the unique Museum of Sèvres and appointed Riocreux as keeper, a position he worthily filled until his death in 1871. His knowledge and untiring courtesy made the vacancy caused by his death a hard one to fill, but the same qualities have assured the success of the present accomplished incumbent, M. Garnier. Under Brongniart's scientific direction the manufacturing processes of Sèvres were greatly improved. Vases measuring 7 feet 10 inches high were made, upon which the most skilful painters of the day reproduced compositions intended to glorify the reign of Napoleon I. Nothing but hard porcelain was produced, as Brongniart had sold off, in 1804, all the white *pate tendre* then in stock. The crowning glory of his life was the writing of "Traite des Arts Ceramiques," in which all the Sèvres processes are described and which is an invaluable contribution to ceramic literature. He died in 1847, and it is not too much to say that whatever progress has been made in the potters' art in France during the last century is traceable to his influence—an influence

rendered dear by his unswerving integrity, the self-effacement of the man in the glorification of his art or country, and other distinguishing traits which endeared him alike to his Emperor and the least important of the Sèvres employes.

BROOCHES. Ladies' brooches in china were quite popular about the middle of last century. They were first made at Burslem in 1849.

BROOME, ISAAC, born at Valcartier, Que., May 16, 1835; had terra-cotta works in Pittsburg, and also in New York, but both ventures were unsuccessful. In 1875 he became associated with Ott & Brewer, Trenton, N. J., and designed and modeled many pieces for them for the Philadelphia Exhibition. The best known are the Baseball Vase, Fashion Vase and bust of Cleopatra. About 1882 Mr. Broome, in conjunction with a Mr. Morgan, started a pottery at Dayton, Ohio, but it was not a success.

BROSELEY, Salop. A small village celebrated for its manufacture of long clay pipes, usually known as "Broseley Churchwardens." The industry has existed there for the last three hundred years. The Benthall Pottery Company and the Broseley Tileries Company (tessellated) have works here, and that of the Salopian Art Pottery Company is in the immediate neighborhood.



BROSELEY PIPES.

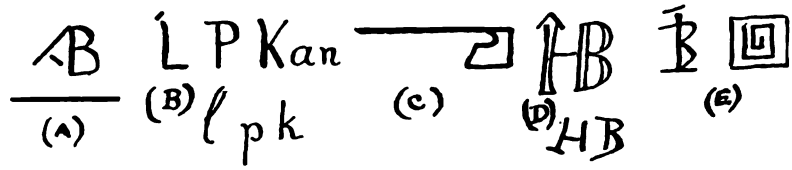
BROUWER, ARIJ, CORNELIS, a potter of Delft, a relative of Huibrecht Brouwer, of the Porcelain Hatchet (Mark A).

BROUWER, GERRIT, potter of Delft, established 1759 at the sign of the Little Lamp. The productions were of an ordinary character and signed with an abbreviation of the name of the sign, L. P. Kan, or l. p. k. (Lampet Kan) (B).

BROUWER, HUGO, potter of Delft, and son of Justus Brouwer. In 1764 he was proprietor of the Three Bottles, and later succeeded his father in the direction of the Porcelain Hatchet (D).

BROUWER, HUIBRECHT, potter of Delft, established in 1679 at the Sign of the Porcelain Hatchet. The products are well known and esteemed, and are very various in character, but always carefully

executed and of beautiful color. They are marked with a hatchet more or less carefully traced. In 1697 the works were directed by Joris van Torenburg, and in 1759 by Justus Brouwer (C).



BROUWER MARKS.

BROUWER, JOOST, or JUSTUS, succeeded to the management of the Porcelain Hatchet in 1759, and, thanks to his large fortune, the manufactory was considerably enlarged and the products improved. Among these were some curious figurines, very decorative polychrome dishes, and a very interesting series of plates representing whale and herring fishing. In addition to the hatchet he also used the mark E.

BROUWER, T. A., JR., Middle Lane Pottery, East Hampton, N. Y. Almost at the extremity of Long Island Mr. Brouwer has established a *botega*, unique of its kind, and here he produces the most interesting and beautiful specimens of pottery. Without any previous knowledge of potting, inspired by the success of a daring experiment, he has for the last few years devoted his energies to perfecting the process he calls "fire-painting." His methods are totally at variance with those of accepted usage, and oftentimes he sets them at defiance. This is particularly true with regard to firing. The importance of gradually heating the kiln and of allowing it to cool off thoroughly before withdrawing the ware, so that it shall not be subject to too great a change of temperature and endanger it cracking, is well known, but Mr. Brouwer does not hesitate to take out a piece of ware in an incandescent state, beyond the door of his kiln into a small iron receptacle made to fit the kiln opening, from which it is presently transferred to a little cooler place, until it eventually reaches a ledge at the back of the kiln, where it remains until cool enough to be handled. Nor does he hesitate to

place a piece of newly glazed biscuit ware in a rose-heat temperature! Whilst such methods are extremely startling, they are as here represented from actual personal observation. At the time of our visit the kiln was already firing—it is an assayer's furnace—and Mr. Brouwer opening wide the door, the kiln being nearly at rose heat, showed three vases, one of which he grasped with a pair of slender tongs and brought out for a moment's inspection. Another one he turned gently around. This was presently withdrawn, followed at separate periods by the other two, each showing a most distinctive color scheme, although the three pieces had been glazed from exactly the same preparation, the difference being due to the action of the fire.

Mr. Brouwer then took two biscuit vases, both of which he glazed, and advancing them by short stages, in a few minutes they occupied their proper position in the kiln from which the vases before mentioned had just been drawn. At our request, one was produced in light, the other in dark colors. The effect of these "fire-painted" vases is magnificent, the exquisite iridescent colors, with their brilliant glaze, being beyond description. But it is when Mr. Brouwer produces these same colors with a mat effect and which he calls dull flame work that he is at his best. A fine specimen of this is a pot with leaves in relief around the top and which in places shows the loveliest iridescence, a regal purple being a very dream of color. The glaze is applied rough, in uniform thickness, but so fired as to cause the lower part to become mat and the upper iridescent and to fall over the pot like a shower. The golden rod vase is pale green in color, with iridescence in purple and gold. The jewel-box, modeled from a turtle caught in a near-by swamp, is in greenish-brown, with silver, gold and purple iridescence. In addition to these effects, Mr. Brouwer has successfully used gold-leaf under the glaze. A small vase with a turquoise glaze, in itself of great beauty, and with small specks of gold introduced, has a most charming and wonderful effect. The only other piece of this

kind we saw was a small sample where the gold-leaf had been used in larger pieces, but the effect was not satisfactory, as indeed we think it never can be, for it must of necessity lack brilliancy—its chief charm. It can never begin to compare with the brilliancy of his gold iridescence, which has all the glow of a ruby. As we stated before, Mr. Brouwer's methods are unique. He turns a shape on a lathe, makes his own molds, does his own pressing and casting, and should he need a color dissolves a few bits of copper or some wire nails in acid and provides himself therewith. An Indian or two are employed, but practically everything that is made is the work of the artist from beginning to end. The beautiful iridescent effects obtained are not surface decorations, nor yet on the biscuit, the coloring matter being a component part of the glaze, the effects being produced entirely by his manipulation of the fire. Mr. Brouwer says that if any potter will take one of his pieces and fire it sufficiently hard the coloring will disappear and leave a plain white vase, but that he will undertake by fire manipulation to restore it to its pristine state. The home of Mr. Brouwer, which adjoins his *botega* (for it is really too small to call a pottery), is an evidence of his versatile talent. The brass andirons, the carved woodwork, many of the chairs and tables, the oil paintings on the wall, are all evidences of his fertile brain and clever fingers, for all were created or made by him. Mr. Brouwer's pottery is all readily sold to summer visitors, but such beautiful specimens of ceramics ought to be more accessible to the public generally, and we hope in the near future, by the establishment of agencies in two or three of our largest cities, that this will be the case, and that without in any way losing its individuality the output may be considerably increased. Mr. Brouwer is just such a man as America needs in her ceramic industry, qualified for independent research, with the necessary brains and knowledge to intelligently direct it.

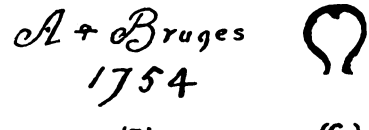
BROWN, R., & Co. (See Lowestoft.)

BROWN-WESTHEAD, MOORE & Co. (See Cauldon.)

BROWNFIELD, WM., Cobridge, Staffordshire. (See Cobridge Wks.)

BROWNHILLS POTTERY COMPANY, Tunstall, Staffordshire. A syndicate of working potters formed this firm and produced some excellent earthenware and stoneware. A coral red was effectively used on this latter. The works are now carried on by Messrs. Salt.

BRUGES (Belgium). Bruges had a faïence manufactory in 1753, founded by Henri Pulinex. A few specimens only are known. These have ornaments in relief, and are decorated in blue and manganese, with sprays of flowers artistically executed. They are signed (F). Jacquemart mentions as belonging to Bruges the mark G, and also H. P. (Henri Pulinex) and B. P. (Bruges Pulinex).



(F) (G)

BRUHL, COUNT, director at Meissen from 1733 to 1763, when he was succeeded by his widow. From 1731 to 1756 was the period of Meissen's greatest prosperity, before Frederick the Great robbed it of molds, models, etc., for the enrichment of his factory at Berlin. (See Dresden.)

BRUNT, BLOOR, MARTIN & Co., the founders of the Dresden Pottery Works at East Liverpool in 1876. They received a diploma at the Philadelphia Exhibition.

BRUNT, G. F., East Liverpool, Ohio, manufacturer of electric supplies.

BRUNT, HENRY, born at Penkhull, near Stoke-on-Trent, January 5, 1852. He served his apprenticeship with Messrs. George Jones & Sons, of Stoke-upon-Trent, leaving there a year or two after its expiration to accept a position at the Minton Factory, but returned to his old firm as foreman of the works. His success in life is a practical demonstration of the utility of the Cambridge University Extension scheme, under which he diligently applied himself to the study of chemistry, successfully passing the examinations. In 1879 he assumed the management of the Florence China Works at Longton, and came to America in 1881, locating at Trenton, N. J., and connecting himself with the Eagle Pottery, which was then ambitious of advancing the art of potting in America. He remained there for two years, introducing several processes which in the then early stages of American potting were valuable aids to its development. He was next with Alpaugh & Magowan at the Empire Works, and introduced the manufacture of bone china of excellent quality, and which was exhibited at the New Orleans Exhibition and received

the first premium. It was while with this company that he used his knowledge of chemistry to the great benefit of the potting industry, studying the composition of American clays and determining their suitability for pottery purposes, and as a result was the first to put to practical use the immense deposits of kaolin in Florida. In 1886 he was engaged as the practical manager of the Chesapeake Pottery, Baltimore, where he introduced the manufacture of opaque porcelain, the first ever made south of the Mason and Dixon line. During his management here he secured the second prize at a contest in Philadelphia for the best semi-porcelain made in America, and in a similar contest the succeeding year was awarded the first prize. On the formation of the Edwin Bennett Pottery Company in 1890 he became largely interested and was appointed managing director, a position he still holds. New processes were introduced and some notable successes achieved. In our article on the Bennett Factory we have already spoken of some of these. One criterion of his management was the bestowal on him of a personal diploma at the World's Fair at Chicago for the great advancement he had made in American pottery, a first-class medal and diploma being awarded to the firm at the same time.

BRUNT, W. H., East Liverpool, Ohio, manufacturer of door-knobs, etc.

BRUNT, WILLIAM, POTTERY COMPANY, East Liverpool, Ohio. White granite factory. Capacity, seven kilns.

BRUSSELS. In the eighteenth century the manufacture of faïence at Brussels was carried to a high point, and its productions equaled those of Delft and Normandy. Dishes similar to those made at Bordeaux, in the shape of a bird—generally a duck or a turkey—the upper part of which formed the lid, were largely made here.

BRUYN, DE, GUSTAVE, Fives-Lille. Manufactures vases, jardinières, pedestals, etc., which are characterized by originality in design, good modeling and a bold treatment of color, differing essentially and strikingly from the usual treatment.

BUCCAROS. In Portugal the word buccaros was long applied to drinking vessels made of unglazed clays, and which are sometimes mistaken for true buccaros. When the scented pottery of America, first imported by the Portuguese, began to be in demand in Spain and Italy, the word in these two countries lost its generic character, and it was only understood to apply to the odoriferous ware made by the American Indians. These came from the heart of Central America, from parts where few travelers dared to penetrate, and were consequently rare and costly. Their shapes and ornamentations

were pure in style, and their highly imaginative conception spoke of an advanced state of art which had little in common with that of Europe. But it was the material they were made of that made them so particularly attractive. The clay used in the manufacture was naurally impregnated with an incomparable and inimitable perfume which was communicated to liquids placed in them. As the buccaros —Noble Buccaros, they were called—got scattered through Spain and Italy, wonderful virtues began to be ascribed to them. It was asserted that a negro could be turned into a white man if he ate buccaros at a certain time—that in case of a burning fever if the patient would hold a buccaros cup in his hand, and strips of linen dipped in the water it contained were applied to his forehead, the fever would abate. Pieces of broken buccaros were either set in gold and used as ornaments, or ground to a powder and the highly scented clay introduced into certain sweetmeats, of which the ladies of the period were inordinately fond. Small pieces were also taken as preventatives against certain illnesses, and these small lozenges of perfumed clay or broken bits of unfired vases were soon raised to the rank of a delicacy, and buccaros-eating was immoderately indulged in. Dr. Daniel Geyers, of Dresden, in a pamphlet published in 1735, reports that he was called in to attend upon a lady suffering from the consequences of having eaten a whole cup and saucer. A cup similar to the one she had eaten was shown to him, and appeared to weigh about an ounce and a half, was made of yellowish clay, unbaked, and so thin as to be easily reducible to powder. It is a matter of regret that no known specimens can with certainty be classed as buccaros, and that the past alone should have had the enjoyment of such a distinct ceramic curiosity. According to contemporary writers, they originated from distinct centers, viz.: Guadalajara, Quinto, Chili, and Natan. Santiago, the capital of Chili, was the great center of production. The making of buccaros was carried on in four monasteries there, the monks depending on their manufacture entirely for their maintenance. Guadalajara, in Mexico, made more highly scented ones; Natan, a small town near Panama, made black ones by the aboriginal tribes. The pottery of Peru and Mexico displays such fertility of invention, and the shapes were so fantastic as to have no parallel in ceramic production, so that the variety of buccaros was almost beyond description. The secret of the source of production remained for some time with the Portuguese, but the demand was so great that an approximate imitation was made in Portugal, and, to the honor of the manufacturers be it said, was sold as a local product. Lisbon was the

principal supply, those of Della Maya being most in request. Modern writers have applied the word "buccaro," or boccaro," to the red and unglazed stoneware of China and Japan; but this appears to be an error. Count Lorenzo Magalotti, who wrote in 1695, and was an enthusiastic admirer of the "Noble Buccaros," deplores the error of some of his contemporaries in applying the term to ware made in the Orient, and is emphatic in stating that they must not be looked for out of the pottery of Central America or the Portuguese imitations.

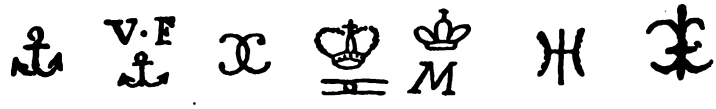
BUCHWALD, JEAN. (See Kiel.)

BUCKHAUSER PORZ. MANUFACTUR, Magdeburg. Manufacturers of china. Established 1833. M 42.

BUCKLEY, near Chester, England. A small manufactory of slip decorated ware is still carried on here.

BUCKNALL & STEVENSON. (See Cobridge Works.)

BUEN RETIRO, Madrid. A manufactory of porcelain founded by Charles III. with workmen and artists from Naples, which accounts for the resemblance of the products to those of Capo di Monti. The classical shapes produced here are very highly esteemed. The works were situated in the palace gardens and public access was denied to them. The King had a room in the Escurial decorated with blue and white plaques in imitation of Wedgwood jasper made there. During the Peninsular War the works were destroyed by Lord Hill (1812). Various marks were used, of which we give examples:



BUERGEN, JAN VAN DER, potter of Delft. Established 1695.

BUHL, H., & SON, Grossbrietenbach. Manufacturers of vases and tea ware. Established in 1780. M 43.

BUIRE, or AIGUIERE. (See Aiguiere.)

BULGARIA. There are nine pottery works in Bulgaria, with a working capital of 2,756,000 francs and employing 670 operatives, whose average wage is about 37 cents per day.

BULKELEY & BENT were potters in Staffordshire the latter part of the eighteenth century.

BULOW, BARON DE, established a manufactory at Liège, Belgium, in 1752, but it was not successful, and his privilege was revoked in 1767.

BUNTZLAU (Silesia). Stoneware has been made here since the

sixteenth century. It is without character and quite commonplace. That made in the last century was sometimes decorated with flowers or armorial bearings in gilded relief or a yellowish white.

BURCH, PAULUS VAN DER ON VERBURG. Master potter established at Delft in 1759, at the Sign of the Pot of Gilded Flowers.

BURETTE LE DOUBLE. The Double Flagon. (See Victoor.)

BURFORD BROTHERS, East Liverpool, Ohio. Manufacturers of white granite and semi-porcelain. Robert Burford is president; George Burford secretary, and O. Burford treasurer. Four kilns. M 44.

BURGESS, JOHN W., Trenton, N. J. One of the original partners in the International Pottery Company (A. D. 1879).

BURGESS, WILLIAM, Trenton, N. J., president of the International Pottery Company. Mr. Burgess during President Harrison's administration served as Consul at Tunstall, a position in which the interests of American manufacturers were carefully looked after.

BURGESS & CAMPBELL. (See International Pottery Works.)

BURGESS & LEIGH, Burslem, manufacturers of earthenware, succeeded Thomas Hulme at the High Street Works. In 1867 they removed to the Hill Top Works, their present location. We give portraits of the founders of the firm. M 45.

BURLINGTON, N. J. The State records show that there was a pottery operated here as early as 1689. It belonged to Dr. Daniel Coxe, of London, who was afterward Governor of New Jersey. His son took charge of his father's interests in America, and in 1691 sold them to the West Jersey Society of London for £9,000, including "a pottery and tools complete."

BURMANTOFTS, a small village on the outskirts of Leeds, gives its name to the pottery made there by the Leeds Fire Clay Company. It has always been of a high order of merit and is applied not only to large and small ornamental pieces, but to friezes and dados for mural decoration. The modeling is invariably good, and the glazes rich and deep in color. Their latest production is termed Anglo-Moresque, which is spoken of as original and striking, the beautiful

embossments being carved by hand, the scheme of ornamentation being bold and enhanced by brilliant colorings separated from the design with sharp effects.

BURROUGHS & MOUNTFORD, Trenton, N. J. Established in 1879. An earnest attempt was made to improve and give an artistic character to American pottery, then in its infancy. No expense was spared in modeling a large variety of ornamental as well as useful pieces, and a class of decoration was evolved which, although partaking somewhat of the style of Doulton, had a certain individuality of its own, and undoubtedly exercised considerable influence on American ceramics. Rich blues were freely and artistically employed. Manufacturing difficulties were, however, encountered, of so serious a nature as to eventually cause the suspension of the firm. M 46.

BURSLEM, the oldest of the towns constituting the group known as the Staffordshire Potteries. Originally it was Burwardeslime, meaning the bower near the wood. It is a town rich in pottery associations; was the scene of Wedgwood's early struggles and of two generations of Wedgwoods before him. Here good old Enoch Wood lived and worked and made his notes and collection of pottery. To-day the Doultons and others worthily uphold the traditions of the town. The Wedgwood Institute perpetuates the memory of her brightest son and educates artists and potters ambitious to follow in his footsteps. The present population of Burslem is 38,000. There are about sixty potteries, almost all devoted to the manufacture of earthenware.

BURTON-ON-TRENT, Staffordshire. Quite a number of potteries have grown up here during the last few years. Woodville, in the immediate neighborhood, has long produced pottery. Swadlincote, another adjacent hamlet, has several sanitary ware works and is the home of the Palissy Pottery Company. Church Gresley produces chiefly yellow ware and tiles. Of the Burton factories, two call for especial notice—William Ault and Tooth & Co. They both produce a large number of ornamental pieces, really well modeled and richly glazed.

BURTON, WILLIAM, F. C. S., one of the foremost ceramists in England. He was formerly the chemist at Messrs. J. Wedgwood & Sons and is now the director of the Pilkington Tile Company of Manchester (*q.v.*).

BUSCH, a German potter who disclosed to the Sèvres authorities the secret of the manufacture of hard porcelain.

BUTLER, FRANK A., a painter at the Doulton Lambeth Factory.

BYERLEY, THOMAS, a nephew of Josiah Wedgwood and admitted by him into partnership A. D. 1790.

C

CABARET, ANTOINE, proprietor of the Sceaux Works, succeeding Richard Glot. (See Sceaux.)

CACCIAPUOTI, Naples. Excellent workers in pottery. At the Milan Exhibition they carried off the gold medal for earthenware. Unfortunately, their work has a great tendency to be immodest in design, a common Neapolitan failing.

CACHAN WARE. Mentioned by Count Rochchouart, who during a long residence in Persia paid great attention to its ceramics. He describes it as having a red body, covered with a stanniferous enamel of great beauty and painted in cobalt under a highly fired glaze. The pieces ring like metal.

CADOGAN TEAPOT. Made in Rockingham ware at the Swinton Factory from an Indian model furnished by the Hon. Mrs. Cadogan. From a hole in the bottom a tube slightly spiral was made to pass up inside the vessel to within half an inch of the top, so that after filling, the pot being turned over into its proper position for table use, the tea was retained without chance of spilling. This shape was afterwards reproduced by Mintons.

CAEN. A manufacture of china was started here in 1798 by a joint stock company, but in spite of its efforts to produce artistic wares its existence was very short. The trademark was "Caen" stenciled. M 46 a.

CADUCEUS, the wand of Mercury, used as a trademark at Meissen 1717-20, and by Powell & Bishop, Hanley.

CÆSAR DE FAENZA worked in the fabrique of Guido Merlingo in Urbino about 1536.

CAFFAGGIOLA, also spelt "Caffagiulo," "Cafagiol," "Chaffaggiolo," "Chaffaggilolo," etc. This Tuscan fabrique was the first to approach within measurable distance the enamel of Luca della Robbia, some seventy years after its first recorded use by him, the earliest pieces

being dated 1507 and 1509. The powerful patronage of Medici was extended to this botega, and some beautiful pieces were produced. Their leading characteristics are a glaze of rich and even quality and purely white, and the use of a very dark cobalt blue, brilliant as lapis lazuli. Metallic lusters seem to have been sparingly used. At first blue only was used, and though the wares of the fifteenth century show improvement, it was not until the sixteenth century that the full harmony of varied colors appears. The name variously spelled appears on the reverse of the ware. The cup illustrated is of early date and is a fine example of the productions of this place. M 46 b.

CAFFAGGIOLA CUP WITH GROTESQUES.

CALATA GIRONE, Sicily. There is considerable variety of opinion respecting the wares ascribed to this locality. Wares found there of Persian ornament are termed Siculo-Persian and may have been made by the Arabs during their stay there, from 651 to about 1200 A. D. The drawing is archaic, the decoration applied directly on the bottom and glazed over, the prevailing colors being blue and black. Siculo-Moresque may be ascribed partly to the time when Sicily belonged to the house of Aragon and the Moors were all-powerful in Spain (1282 to 1409), and later to the Moors who, flying from Spain, took refuge in Italy and Majorca (1500 to 1700), specimens of copper lustered ware having been found in Calata Girone.

CALDER, Portugal. There is a manufactory of faïence here producing reproductions of Palissy ware, etc.

CALDWELL & WOOD. (See Enoch Wood.)

CALHOUN, W. A., secretary of the East End Pottery Company, East Liverpool, Ohio.

CALIGARI, ANTONIO FILIPPO, with Antonio Casali, established a fabrique at Pesaro in 1763. The former was an artist in pottery from Modena. They produced excellent work.

CAMAIEU. A painting executed in single color, varied only by shades. When in gray it is termed *grisaille*, or in yellow, *en cirage*.

CAMBRIAN WORKS, Swansea. (See Swansea.)

CAMBRIDGE ART POTTERY COMPANY, Cambridge, Ohio. Founded in 1901. They make jardinières and pedestals, etc., in a variety of colored glazes, and some painted pieces in the Rookwood style, which they term Torrhea. Mr. Charles L. Casey, the manager, hopes in the near future to give these ornamental goods a more original tone. The mark is impressed. M 47.

CAMELFORD, LORD, formerly Thomas Pitt, gave pecuniary assistance to Cookworthy in the foundation of the Plymouth Porcelain Works.

CAMILLO, an artist at Ferrara, early in the sixteenth century.

CAMPANI, MARIA FERDINANDO, an artist at the San Quirico botega, and afterwards at Sienna. (See Chigi.)

CAMPBELL, COLIN MINTON, Stoke-upon-Trent. Mr. Campbell was admitted into partnership with Herbert Minton about the year 1848, and at the death of the latter (1858) became, with Michael Daintry Hollins, sole proprietors. This partnership was dissolved in 1867, Mr. Campbell retaining control of the business and shortly afterwards admitting into partnership his two cousins, T. W. and H. Minton. He died in 1883. Mr. Campbell, though not himself a potter or an artist, exercised by his personality an immense influence on the fortunes of the firm. A great organizer, a quick appreciator of either latent or developed talent; a faculty, given to few, to judge and anticipate public taste; an extraordinary passion and capacity for work, were a few of his characteristics. Possessing these, in addition to unlimited capital, it is not to be wondered at that he gathered round him such an aggregation of talent, perhaps never before surpassed, and achieved triumphs in ceramics almost bewildering. In this connection Mr. Campbell's reception in this country on the occasion of his visit to the Philadelphia Exhibition will be remembered. Mr. Campbell in addition to his duties as the ruling spirit of a great industrial institution, found time to officiate as chairman of the North Staffordshire Railway Company and also to represent his county in the House of Parliament.

CAMPBELL, JOHN A., partner in the International Pottery Company, Trenton, N. J., from 1879 to 1895.

CAMPBELL TILE COMPANY, Stoke-upon-Trent. Upon the

COLIN MINTON CAMPBELL.

dissolution of partnership between Mr. Campbell and Mr. Hollins, of the firm of Minton & Co., a tile works was started at Fenton under the style of R. Minton, Taylor & Co., but in consequence of legal difficulties concerning the use of the name "Minton" on tiles, it was abandoned and a new works built adjoining the Minton Factory at Stoke, and the business was then and is now known as the Campbell Tile Company. Large quantities of encaustic and other tiles are produced.

CAMPBELL, JOHN, partner and manager of above firm.

CANDIANA, near Padua, Italy. A faïence manufactory existed here early in the seventeenth century, and produced wares decorated with flowers and rosettes in the style of pseudo-Persian.

CANDELIERE A. A decoration made popular at Castel-Durante, Italy. Dolphins, dragons, marks, etc., are arranged in symmetrical patterns with foliations. They were adapted from metal work and illuminations.

CANETTES. This name is generally given to a rough stoneware of crude fluted form, the first specimens of which tradition ascribes to the Countess Jacqueline of Bavaria, who when a prisoner in 1425 at the castle of Teylingen, near Leyden, made as a diversion canettes (pint jugs), which she threw into the castle moat, where they were afterwards found and called by the peasants "Jacoba's Kannetjes." (See Jacqueline of Bavaria.)

CANTAGELLIS, Naples. This firm has existed for about a century as makers of common earthenware stoves, etc. In 1878 they branched out into decorative pottery, from what at first was regarded as a trivial act of kindness. A poor whitewasher came to Signor Ulysses Cantagelli and said he was starving and unless he found work would throw himself into the Arno. Seeing that the man was in earnest, Signor Cantagelli took him into the works and set him to paint leaves and flowers on pots. The whitewasher took kindly to his work and became a clever painter of faïence, in which art he instructed his two sons. The new product created a furore and was eagerly bought by the public, and the whitewasher, in addition to his two sons, has now thirty painters and decorators working under him. Cantagelli has been extremely successful in adapting to his own pottery the designs and shapes of various styles of work, such as Persian or Hispano-Arabic. The body is an inferior earthenware on which is applied a superior quality of enamel, on which fine results are obtained. His greatest success has been with figures in high relief after the manner of Luca della Robbia; fifteenth century plates and vases showing the beautiful metallic lusters of Maestro Giorgia. The prismatic glaze is given to it in the kiln by means of salts of copper and silver reduced or decomposed in the fumes of green wood, which is the same as the antique process. What is generally known as Cantagelli ware is the real old maiolica covered with a tin enamel, the painting being executed on the raw glaze. Cantagelli is also very successful in imitating the pale blue Savona ware, the color more nearly resembling the original than any other reproduction. The trademark is a crowing cock, roughly painted, which is the English for Cantagelli. M. Ulysses Cantagelli died in the spring of 1901.

CAPO DI MONTE. The most famous of all Italian porcelain. Founded in 1736 by Charles III., who frequently worked in the factory, its products at a very early date assumed a distinct individuality. The artists sought inspiration from the sea, and in its corals and shells found the *motif* for very charming creations, enhanced by delicate and natural colorings. The most delicate china was made

with embossed figures, which were carefully painted, the flesh tint delicately stippled. When Charles III. founded the Buen Retiro factory he took a number of the artists with him. His successor, Ferdinand, was not successful, and the works were closed in 1821. The marks are as follows:

The works of Capo di Monte have been very freely and cleverly imitated. Ginori of La Doccia has some of the original molds and uses the Capo di Monte mark.

CAPPELLMANS, of Brussels. Made amongst other copies of English ware the willow pattern plate. In china, fine pierced fruit-basket supported by kneeling figures.

CAREY, T. & J., King Street Works, Longton. Earthenware manufacturers prior to 1850, when the works passed into the hands of John Edwards. We have a blue plate of their make with a scene from "The Lady of the Lake," very poorly drawn.

CAROLINA. Clay from Carolina was exported to England as early as 1766, and the use of it became quite extensive, Wedgwood using it largely. The year previous we find him expressing fears for the earthenware trade of England with America on account of the establishment of some "new pottworks in South Carolina."

CARR, JAMES. Born at Shelton and served his apprenticeship to John Ridgway at the Cauldon Place Works. He was afterward employed by James Clews, of Cobridge, and came to this country in 1844. He worked first for the American Pottery Company, of Jersey City, and in 1852 he rented the Swan Hill Pottery at South Amboy. The factory, which was built by C. Fish, had not been a success, and it had been vacant for two years. His partners were Daniel Greatbatch, Thomas Locker and Enoch Moore, but the partnership must have soon ended, as in 1854, when the factory was burned down, he and Mr. Locker were the only partners. They made a line of druggists' ware, including the once familiar blue dome top jars. In 1855 he opened a factory at 442 to 452 West Thirteenth street, New York, forming a partnership with Mr. Morrison in the following year. The staple production had heretofore been Rockingham and yellow ware, which continued until 1858, when they began to make white granite. Some experiments were made with bone china, but

the cost of production was too heavy and its manufacture was abandoned. In addition, for two years he made majolica in a large variety of articles. He bought out Mr. Morrison's interest in 1871. He received the gold medal at the American Institute Fair and the silver medal at the Paris Exhibition, that being the highest prize awarded to any American manufacturer. After fifty-seven years of active employment in the pottery business Mr. Carr retired (1889), and is now spending the autumn of his life in a well-deserved rest. With the exception of Mr. Edwin Bennett, Mr. Carr is the oldest living potter in America.

CARR, THOMAS, son of the above, served an apprenticeship of nineteen years with his father, and upon his retirement went to Wheeling, W. Va., as manager of the Warwick China Company, being appointed president in 1893—a position he still worthily fills. It speaks volumes for Mr. Carr's training and adaptability that the Warwick China Company can say that under his management they have never had a piece of crazed ware. Mr. Carr was born in 1855.

CARRIES, a sculptor, of Paris, a man of exceptional versatility and talent, who, impatient of the tediousness of his art, determined to express his thoughts in clay, and who accordingly became for a time lost to the world in the mountains of Morvan, and in the midst of the rustic potters there he studied the A B C of his trade. Here he produced a large number of pieces which gradually assumed the brightness and delicacy of color for which his *grès* became celebrated. He was himself his harshest critic, and unhesitatingly destroyed any piece he did not consider glorified the medium he had adopted to express the songs that burst from his heart, no matter whether the defect was one of craftsmanship or of artistic expression. The Princess Scey-Montbéliard entrusted him with an order for a decorative door which was to open on the mysterious sanctuary where reposed a portion of the manuscripts of "Parsifal." The order caused him profound joy, and he immediately became absorbed in an infinitude of researches of the most subtle character. His abnormal critical judgment caused him to regard what he had produced after two years of hard work as mere trials and which were but the precursors of something infinitely better, when in the summer of 1894 death put an end to his labors, and one of the most promising of French ceramists was lost to the world.

CARTLIDGE. Mr. Charles Cartlidge, who for a number of years had acted as New York agent for William Ridgway, started a small factory at Greenpoint about 1848 for the manufacture of china, producing at first principally door furniture of excellent quality, and

employing about sixty hands. Later, tableware was made in commercial quantities, at first in bone china, but later in a true hard porcelain. Elijah Tatler, whose son, Mr. W. H. Tatler, now conducts at Trenton one of the most successful decorating works in America, was one of the artists employed. Josiah Jones was the modeler, his figure pieces—busts of prominent men—and plaques being reproduced in Parian. Imitation Wedgwood jasper was also made. In 1854 or 1855 Mr. Cartlidge, through some outside investment, lost a considerable share of his fortune. The firm was dissolved and reorganized under the style of the American Porcelain Manufacturing Company, with Mr. Cartlidge as president; but the new company failed to successfully conduct the concern, and the factory was closed in 1856, the building being afterwards torn down.

CARTWRIGHT, RICHARD, & SON, made butter-pots marked with their name at Burslem from 1640 to 1675. The potter and his family in those days usually constituted the entire working staff of the "pottery."

CARTWRIGHT BROTHERS, East Liverpool, Ohio. C. C. and decorated staples. William Cartwright is president and treasurer; S. R. Cartwright, general manager; John T. Cartwright, secretary. Six kilns.

CASA PEROTA. (See Faenza.)

CASALI. (See Caligari.)

CASE MOLD. (See Molds.)

CASE & MORT. (See Herculaneum.)

CASHMERE. The name of a decoration in the pseudo-Chinese style, particularly executed at Delft, which is characterized by a mixture of rich lambrequins, gorgeous flowers and brilliant birds. This decoration was principally used on large fluted Chinese vases.

CASTEL-DURANTE (Italy). A small town situated not far from Urbino, with whose products its own are often confounded. As early as 1361 faïence appears to have been produced at Castel-Durante, but none of its pottery can be recognized until we come down to 1508, after which specimens multiply. From the end of the fifteenth century to the beginning of the eighteenth century the manufacture of faïence was continued here without interruption, but the industry was at its zenith in the seventeenth century. Toward the middle of the seventeenth century the artistic merit seems to have declined. The faïence of Castel-Durante may generally be recognized by the pale buff color of the paste and the richness of the glaze. The ware was ornamented with garlands, intertwined with artistic or military trophies laid in white on backgrounds of various

colors, outlined in blue, and modeled in bistre with extraordinary skill. Among the chief products of Castel-Durante were pharmacy jars decorated with grotesques, sirens, sea-horses, etc., on very dark and sometimes quite black backgrounds. Castel-Durante, admitted to the rank of city in 1623 by the Pope, Urban VIII., who was born there, changed its name at that time for Urbania, that may be found on the faïences of that period, which possess no artistic merit. When at its best Castel-Durante rivaled Faenza in its products. M 47 a.

CASTEL-DURANTE DECORATION.

CASTELLANIS, Rome, are perhaps the most artistic of all modern Italian potters. At the Turin Exhibition they showed a magnificent vase of Oriental character which both from an artistic and manufacturing standpoint, was quite perfect.

CASTELLI (Italy-Abruzzes). Little or nothing is known of the products of Castelli previous to the seventeenth century, although there is a faïence plaque enameled in white in the Museum of Industrial Art at Rome attributed to the fifteenth century. In the seventeenth, and still more in the eighteenth century, Castelli became one of the most important centers of faïence manufacture. In addition to the ordinary ware Castelli also produced some fine works, among others dishes ornamented with figure subjects, with sometimes gold enrichment. Nothing positive is known of the manufactory of Castelli, but it appears to have always been in the hands of one single family by the name of Grue, in which there were numerous artists, and among them some men of undoubted talent. Specimens are known bearing the signature or initials of F. A. Grue, 1677; C. A. Grue, Ant. Grue, 1718; Lebanous Grue, Saverio Grue, 1747. In addition to what they themselves painted, they employed artists of great ability and "continued the work which educated the Neapolitan school of potters, and enabled the Capo di Monte factory at Naples to find artists who could produce those excellent paintings which made that ware more valuable than its relief work."

CASTELLO (or Citta di Castello), near Gubbio, Italy. From the fifteenth to the eighteenth century it was principally in this city that the style of decoration was employed that the Italians name "sgraffio" and which resembles the process of decoration by engobage used in France as early as the thirteenth century. The decorations on glazed wares of Citta di Castello represented the popular art in Italy at the beginning of the sixteenth century. There is a beautiful specimen in the Louvre, a large cup dating from the end of the fifteenth century, on which a young man is represented playing the mandolin between two women, one of whom accompanies him on the tambourine. The base of the cup is bell shaped, ornamented with modeling, while the stem is surrounded by three lions, seated, that support the base of the cup on their heads. The ground is red, covered with an engobe in white clay, on which the design is traced in such a manner that the red appears and forms the design in outline. The Museum of Sèvres also possesses some very interesting specimens of this glazed pottery, the decoration of which, according to Piccolpasso, being designated in Italy under the name of the decoration Alla Castellana. The same style of decoration was used equally at Padua and Pavia, and more than all at La Fratta, a little neighboring town of Citta di Castello.

CASTILHON (France). At the end of the last century faïence was made here in imitation of that of Moustiers. A dish with grotesque figures, with garlands in greenish yellow, outlined in black, is marked "Castilhon."

CASTING. A process in pottery so called, and which the French designate as "coulage." A plaster mold is filled with slip, and the plaster absorbing the water, the clay adheres to the walls of the mold, and when this attains the required thickness the slip is poured away, and after drying for a time the cast can easily be removed.

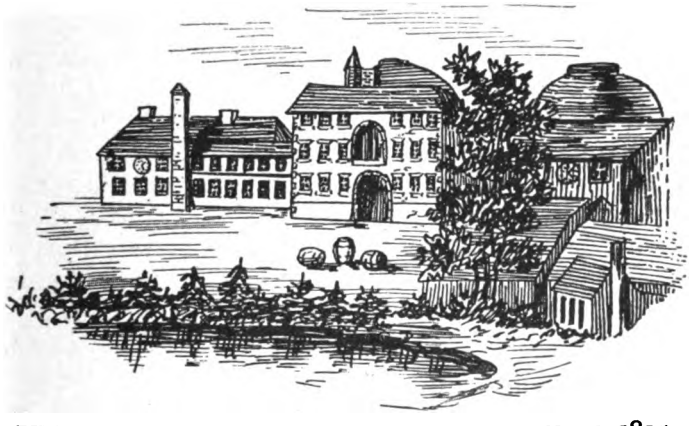
CASTLEFORD, twelve miles from Leeds, England. A pottery was established here in 1790 by David Dunderdale for the manufacture of queensware. Black or Egyptian ware of a fine quality was made, and a very large trade was done with Spain and the Baltic, the firm owning several vessels of heavy burden. The works were closed in 1821, but afterwards reopened as a manufactory of the very cheapest kind of earthenware. The goods were marked "D. D. & Co., Castleford." There is still a considerable industry here, about eight potteries being in operation.

CASTOR or CAISTOR WARE. (See Anglo-Roman.)

CATTO. An artist at Ferrara, Italy, A. D. 1528.

CAUGHLEY, Salop, England. These works were situated on the

opposite side of the Severn from Coalport, and were built by Mr. Browne, of Caughley Hall, and after his death were managed by a man named Gallimore, to whom in 1754 a lease of the works was granted for a term of sixty-two years. In 1772 Mr. Thomas Turner, who had probably been employed in the works and who married Gallimore's daughter, succeeded him. Turner was an excellent chemist, a skilful designer, and also an engraver. Mr. Gallimore relinquished all control of the works in 1799, and Turner some time afterward took in a partner named Shaw, the firm style being "Turner & Shaw." The early productions were not far removed from earthenware, but the body gradually assumed a finer and more transparent character. The first decorations were principally in blue. In 1780 the famous Willow pattern was engraved here by Thomas Minton, and this was followed by the almost as well

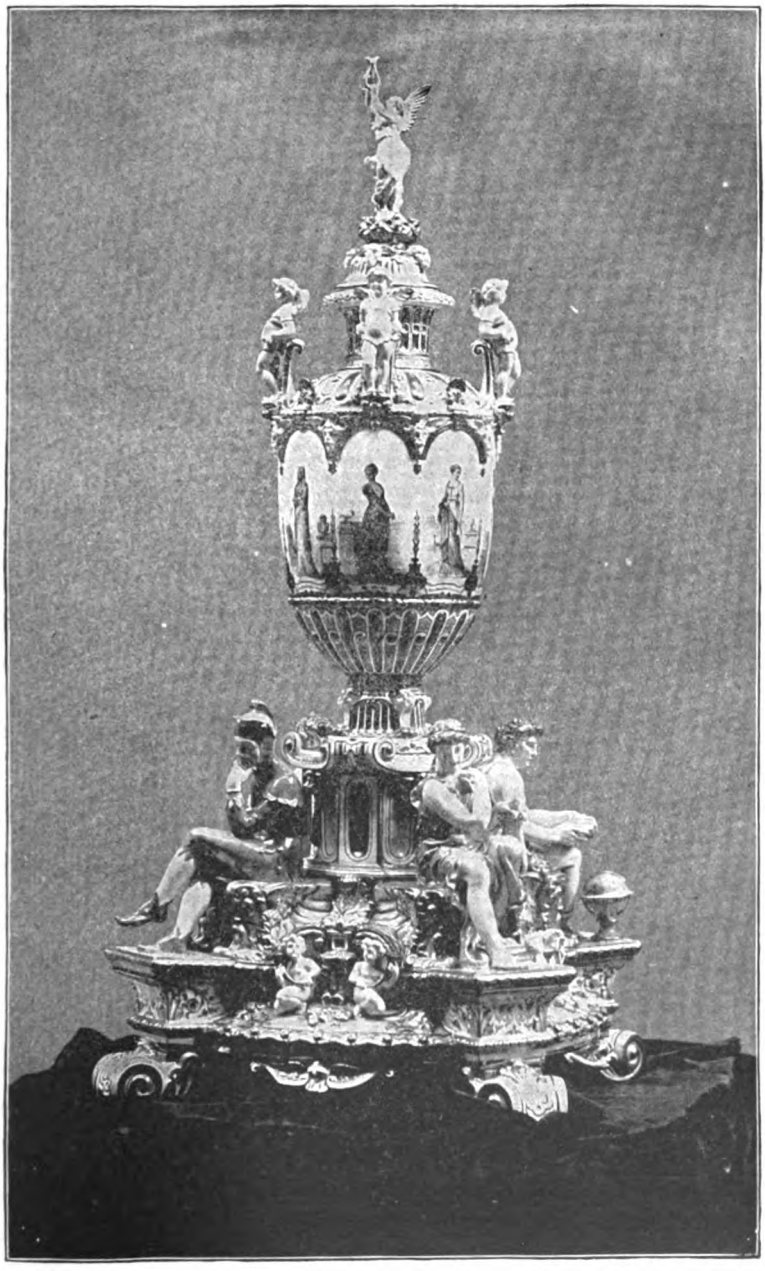


THE CAUGHLEY CHINA WORKS. TAKEN DOWN IN 1815.

known "Broseley," or blue dragon, pattern. Mr. Turner made a visit to France to inspect the works and processes there, and brought back with him several skilled workmen. When Mr. Chamberlain commenced his china works at Worcester, 1788, he bought most of his white ware from Caughley, and in all probability much of the Worcester ware was printed there. The invention was an important one,

and the isolated situation of Caughley seemed to afford a better chance of secrecy than at Worcester. Mr. Church, however, dissents from this view. In 1798 or 1799 the works were purchased by Rose, of Coalport, by whom they were worked until 1814, and were a few years later entirely demolished. The marks used at Caughley were an S and a C in underglaze blue and the word "Salopian." A filled crescent is also ascribed to this works. M 48.

CAULDON. Cauldon Place Works, Stoke-upon-Trent. The early history of this celebrated factory is told in our sketch of the life of Job Ridgway and his two sons, John and William. For some time William had not been connected with the Cauldon Works, and in 1859 John retired, the business passing to Mr. T. C. Brown-Westhead, Mr. Bates and Mr. William Moore, and the style of the firm changed from John Ridgway & Co. to T. C. Brown-Westhead, Moore & Co. Mr. Moore was a practical potter who had been for some years in the employ of John Ridgway. Mr. Bates retired in a very short time, and the untimely death of Mr. Moore followed in 1866. His brother James then took charge of the manufacturing department, was admitted as partner in the firm in 1875, and died in 1881. Mr. Brown-Westhead died in 1882, and the business then passed into the hands of W. B. and F. T. Moore, sons of William Moore, who are the present proprietors. It is only within recent years that the products of the firm have been spoken of and emphasized as "Cauldon," a step almost necessary by the short names other English chinas were known by—"Minton," "Spode," or "Copeland," etc. The products of this firm are extremely varied, ranging from sanitary ware to the most delicate china. A mere catalogue is all that it would amount to if we tried to enumerate them all. Earthenware services in which the conspicuous feature is the beauty of the patterns and the excellence of the engravings are largely produced. Recently, in obedience to the popular expression of fashion, the firm have reproduced in a rich flow blue some of the successes of the Ridgways. On this side of the water, at least, it is by their china that they are best known, "Cauldon" being accepted as a guarantee of excellence by those who do not care to trust to their own judgment, while experts claim that in purity of body, in manufacturing skill and general excellence of decoration, in the richness of its perfectly transparent glaze, it stands to-day the peer of any china manufactured. The various international exhibitions have seen Messrs. Brown-Westhead fully represented—represented in such a worthy manner that the highest honors were necessarily theirs. The recent one at Chicago was no exception to the rule.



SHAKESPEARE VASE. "CAULDRON."

Gathering around them a brilliant array of talent, the firm was able to produce an exhibit in every way satisfactory, and one was at a loss whether to admire most the colossal Shakespeare vase, with its beautiful modeling and delicately painted panels, or some small pieces on which an unknown artist had produced rich blendings of color, distinctly English in character, but rivaling in tones the best work of Sèvres. The firm have the assistance of such able painters as Boullemiere in figure work; Bernard for game subjects (a set of cups and a tray painted by him being perhaps the most charming set in the exhibition); Sieffert, a figure painter whose coloring is always charming; Berbeck for landscapes; and a host of others. "Cauldon" is distinctively English china. Old traditions are followed in the richness and warmth of the coloring and in the natural treatment of flowers, etc., in the decoration; but the intelligent treatment of the same renders criticism harmless. Mr. J. Leland is the general manager of the works—a position his long service in the firm eminently qualifies him for. M 49.

CAULIFLOWER WARE. Pieces such as teapots, etc., made in imitation of cauliflowers by Whieldon and other manufacturers of the same period. The modeling of the pieces is excellent, whilst the contrast between the creamy yellow and the rich green of the leaves is very pleasing. It was made in immense quantities. M. Solon says of it: "The execution is as simple and forcible as the idea. It has just the amount of conventional treatment that a work of art demands to become a type." The Bennett Pottery Company, of Baltimore, make an excellent reproduction of the cauliflower teapot.

CAULIN. The old name in England for kaolin.

CAUSSY, PIERRE. Son of the following. (See Quimper.)

CAUSSY, PIERRE PAUL. Master potter established at Rouen in 1720, Rue Saint Sever; he died in 1761. His son, Pierre Caussy, in 1743 took the management of the manufactory founded about 1690 in the suburbs of Loc Maria, at Quimper; there he used polychrome decorations so much in style about the middle of the eighteenth century, but after having servilely copied

them he transformed them in the effort to create an original style—always, however, resembling that of Rouen. Unfortunately, the faïence was coarse and thick, covered over with a rather grayish enamel. The manufactory of Sèvres possesses some *poncifs* of the manufactory of Caussy. He often marked P. C., or simply C., in manganese. (See Quimper.)

CAVAZZUTI had a fabrique at Sassuolo, near Modena, Italy, about 1741.

CELADON. When Chinese porcelain began to arrive in Europe it included some pieces of a beautiful sea green color which, in France particularly, was welcomed enthusiastically, and received from its admirers there the name of Celadon. A popular novel published in 1647 by Honoré Darfe had for its central figure the "Bergen Celadon," a fascinating figure in a group of ideal shepherds and shepherdesses who disported themselves in an imaginary world of love and poetry. All the characters are described as dressed in such tender hues of silks and gossamers that no commonplace colors could be imagined to correspond with the delicate shades dreamed of by the poets. The subdued gamut of the colored glazes of the new ware were declared to form the nearest approach to the harmonious tones Celadon himself would have wished to disport in. These early specimens, according to Chinese authorities, were but skilful imitations of original types made in China, as no genuine example of the original Celadon would have been allowed at that time to leave China. The color was produced by mixing it with the glaze, giving it a wavy and beautifully translucent depth. The pieces were generally plain, but were sometimes decorated with raised flower designs.

CENCIO, MAESTRO. Vincenzio, son of Maestro Giorgio, worked in his father's fabrique until 1536, where he was known as Maestro Cencio. (See Andreoli.)

CENTRAL NEW YORK POTTERY, Utica, N. Y. A manufacture of a good quality of stoneware has been in existence here for many years, and still continues.

CERAMIC. The designation of the potter's art and its productions. It is probably derived from a Greek word, "kepac," a horn, which was used in early times as a drinking-cup. The son of Bacchus (and Ariadne) was Keramos, the patron of potters, which gives the supposition an air of reality.

CERAMIC ART COMPANY, Trenton, N. J. Incorporated under the laws of New Jersey, May 18, 1889. Mr. Jonathan Coxon, president, and Mr. Walter S. Lenox, secretary and treasurer. Mr. Coxon

retired in May, 1896, Mr. Lenox purchasing his interest, the present secretary being Mr. H. A. Brown. The product of the Ceramic Art Company consists of fine china body, decorated in an artistic manner either in the style of Belleek or with well-executed painted subjects distinguished for their individuality. Mr. Lenox has been fortunate enough to gather around him a staff of artists who share his ambition to make for the products of the Ceramic Art Company a distinct character of their own, entirely original and entirely independent of any foreign influence. Their treatment of the loving-cup, in a dozen different forms, exemplifies this. Painted in monochrome, usually a blue of exceptional softness, an underglaze color is applied on the glaze and then subjected to a glost fire, giving all the durability and softness of an actual underglaze decoration. The process is, however, fraught with peril, as frequently pieces have to undergo this heavy fire five or six times before a satisfactory finish is attained. In vases the variety of shape is very extensive, and it is difficult to make a selection where purity of form is such a marked characteristic. The Egyptian lotus leaf has been cleverly adapted as a receptacle for flowers, sometimes with an attendant Cupid. The Ceramic Art Company in its particular line has done and is doing, with a steadiness of purpose no obstacles have made them deviate from, much to elevate the ceramic art in America. M 50.

CERAMIC ART COMPANY (L'Art de la Ceramique), Florence. The faïence made here draws its inspiration from the early Tuscan masters, especially Botticelli. The decorations are a combination of modeling and painting, the flowers being painted, whilst the leaves are boldly modeled and sprung out of the vase, returning again to form the handles. The business was founded in 1898 by M. le Compte Giustiniani. Galilleo Chini designs most of the forms

and M. Vittoria Giunti directs the technical work. They also make wall tiles.

CHAFFAGIOLA. (See Caffaggiola.)

CHAFFERS, RICHARD. A potter of Liverpool whom Wedgwood regarded as no mean rival. He made both natural china and earthenware. In a Liverpool paper of December 10, 1756, the following advertisement appears: "Chaffers & Co., china manufacturers. The porcelain or china made by R. Chaffers & Co. is sold nowhere in the town but at the manufactory at Shaw's Brow. Considerable abatement for exportation and to all wholesale dealers. N. B.—All the ware is proved with boiling water before it is exposed for sale." The works were closed at his death. Responding to the urgent request of an old servant who lay sick of the fever to visit him, he took the fever and died from it. M 51.

CHAFFERS, W. Author of "Marks and Monograms on Pottery and Porcelain," published in London in 1876. This work has become a standard reference, and though Mr. Jewett severely criticises the author, it is on the whole reliable and trustworthy.

CHAMBERLAINS. (See Worcester.)

CHAMBON. Director of the Sinceny factory about 1775. (See Sinceny.)

CHAMBRELANS. A name given to porcelain painters who worked in their own dwellings and decorated or employed a sometimes numerous staff to decorate the porcelain manufactured in Paris and Limoges for the large Parisian retail establishments.

CHAMBRETTE, JACQUES. (See Luneville.)

CHAMPION, RICHARD, Bristol. Champion seems to have been making some experiments with American clays with a view to making china as early as 1765. In 1768 he established a factory at Bristol, and probably worked under a license from Cookworthy, who in 1770 removed his Plymouth factory to (what is now) 15 Castle Green, Bristol. Champion bought Cookworthy's patent rights in 1773, the legal transfer being completed the following year. From 1773 to 1781 Champion was owner of the Castle Green factory, and carried on his manufacture there. In 1775 he petitioned Parliament for an extension of Cookworthy's patent for a term of ten years, which was violently opposed by the Staffordshire potters, led by Josiah Wedgwood, in spite of which the act received the royal assent in due course. In 1781 he disposed of the patent to a syndicate of Staffordshire potters, who originated the hard porcelain works of New Hall, Shelton. The stock was sold by auction in May, 1782. After living at Newcastle, Staffordshire, for a short time, Champion

left England in 1784, and settled on a farm called Rocky Branch, in South Carolina. He died October 7, 1791, in his forty-eighth year. The most characteristic productions of the Bristol Factory

BRISTOL CUP AND SAUCER. MADE FOR EDMUND BURKE, 1775.

are white china biscuit plaques decorated with flowers and foliage in relief. These varied in size from three and one-half inches to eight and three-quarters, one of the latter size having a bas-relief bust of Franklin. This was sold in 1874 for £165—about $825. These flowers were of exquisite tenuity and delicacy, and were marvels of ceramic skill, and were far finer than those made at Derby. Statuettes were also largely made, and also a fine series of hexagonal vases painted with foliage and exotic birds. Sumptuous table services were also produced, with grounds of lapis lazuli blue and elaborated gilded surrounding panels of painted flowers. In contradistinction to this was the Cottage china, which was thin in substance, with simple yet bold enamel decorations such as small bouquets of flowers with a border of festooned ribbons. The Cottage china was glazed before being fired. Bristol china is milk white in color and is extremely hard. The glaze on the fine pieces is very faint, but on the commoner pieces has a pale bluish tint. It is very thin and not very brilliant. The principal Bristol mark is the

BRISTOL "BISCUIT PLAQUE."

alchemic symbol for tin (Jupiter), generally accompanied by a workman s mark. The other most important one is the letter B, also accompanied by workmen's marks or numbers. M 52.

CHANAK-KALESI (the pottery castle) is the name given by the Turks to the "Castle of Asia," on the banks of the Dardanelles. The name is derived from the manufacture of faïence here, which has been celebrated for a long time, probably some centuries. Water jars of grotesque shape, brilliantly but coarsely colored and well glazed, are the main production, together with water-bottles and curious ornamental pieces.

CHANDERNAGOR, India. Unglazed pottery, water-jars, bottles, etc., are produced here.

BRISTOL HAXAGONAL VASE.

CHAPLET. An artist at Bourg-la-Reine, afterwards associated with the Havilands at Limoges in the production of "Haviland faïence."

CHAPMAN, D., Longton, Staffordshire. China manufacturer. M53.

CHARDIN. An author to whom we are indebted for much information respecting the pottery of Persia as it was in the time of Queen Elizabeth.

CHARLOTTENBURG, near Berlin. A hard paste factory was founded here in 1760 by Pressel, which was eventually absorbed by the Royal Berlin factory.

CHARPENTIER. (See Faïence d'Oiron.)

CHATEAUNEUF. A member of the first firm at Sceaux (1748-9). (See Sceaux.)

CHATILLON (Seine, France). There was a manufactory of hard porcelain here in 1775.

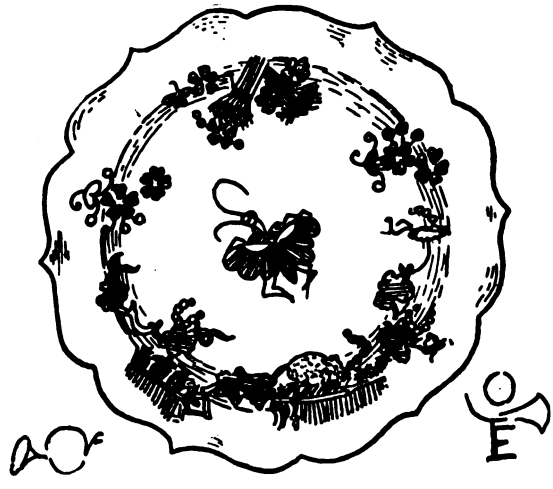
CHATTERLEY, SAMUEL, Hanley, Staffordshire, a potter at the end of the eighteenth century.

CHA-NO-YU, or tea ceromonies of Japan. Rules for the regulation of these ceremonies were made about the middle of the fifteenth century and were the cause of the large prices occasionally paid for the pottery used in them. They are now nothing more than friendly reunions. The room destined for the ceremonies was known

as Kakoi (the enclosed) or Sukiya, and measured 4½ mats (a mat about 6 by 3 feet), with a small room leading off it called Midzuya (water-room), where the utensils were arranged. Surrounding the house was a garden, Ro ji (dewy ground). In the summer the garden was decked with flowers, the guests took off their shoes, and a portable furnace was used. In the winter the garden was strewn with pine needles, the guests retained their shoes, and the furnace was a pit in the floor filled with ashes. The hours fixed for the invitations were 4 to 6 A. M., noon, and 6 P. M. The guests assembling in a pavilion in the garden announce their arrival by striking on a wooden tablet or bell, when the host appears to conduct them into the chamber. The entrance being only three feet square, the host kneels and lets the guest creep in before him. The guests having arrived, and being seated in a semicircle, the host goes to the door of the side room and says: "I am very glad that you have come. I now go to make up the fire." He then brings in a basket containing charcoal of a prescribed size, a brush made of three feathers, a pair of tongs, the stand of the kettle, a lacquer box containing incense, and some paper. He again leaves the chamber to bring in a vessel with ashes and its spoon. He then makes up the fire and burns incense to overpower the smell of the charcoal. While thus occupied the guests beg leave to examine the lacquer box, often an object of great value. This closes the first half of the ceremonies, and host and guests alike withdraw. The second part commences with eating, and as it is a rule that nothing shall be left, the guests carry off any fragments that may remain. The host then brings in one at a time the kettle, table, two tea jars containing fine powdered tea inclosed in bags of brocade, fresh water and a tea bowl of porcelain or earthenware, simple in form, but remarkable for its age or associations. After solemn salutations and obeisances the utensils are wiped with a purple silk cloth and some of the tea is placed in the bowl, hot water poured on, and the whole vigorously stirred. A boy then carries the bowl to the principal guest, from whom it passes round the party to the last, who returns it empty to the boy. The empty bowl is then passed round so that all may admire it. The utensils are then washed by the host, and the ceremony is at an end. The rules forbid any conversation on worldly subjects, such as politics or scandal, no distinction of rank is observed, and the meeting should not last longer than two hours.

CHANTILLY. The Chantilly Works were founded in 1725 by Cignaire Ciron under the patronage of Louis Henri, Prince de Conde. The earlier products are remarkable for the beauty and whiteness

of the paste and for the perfect though simple decoration, chiefly in imitation of Imari ware. Corean decorations, of which the Prince de Conde had a fine collection, were also copied. It is interesting to note that on Chantilly porcelain (especially on the earlier productions) the glaze is stanniferous, or opaque, instead of vitreous, or translucent, as on other soft porcelain. This glaze was productive of very harmonious and delicate tones in the coloring of the decorations. After the death of its founder the products of the works deteriorated. The Chantilly porcelain is always marked with a hunting horn, originally carefully traced in red, and later drawn roughly in blue and accompanied by a letter indicating either the decorator or as a reference. On a few rare pieces the word Chantilly is fully written. After the French Revolution the factory was revived by an Englishman named Potter, who made both china and faïence, imitating English wares. In 1803 a new factory was founded by Piggary.



COMPOTIER. CHANTILLY PORCELAIN.

CHAPELLE. There were several faïence painters of this name, the first and best known of whom is Pierre Chapelle, who in 1725 worked in the manufactory of Mme. de Villeray, in the suburbs of Saint-Sèvres at Rouen. There he painted among other pieces two large globes which formerly decorated the entrance of the Castle of Choisy-le-Roi, and which bear the inscription: "A Rouen, 1725. Painted by Pierre Chapelle." Later he was at Sinceny. He died in 1760, aged 75 years. His brother, son and nephew were all faïence decorators, but there are no signatures of theirs known.

CHAPELLE-AUX-POTS (LA), Oise, France. The greater part of the glazed pottery with which the Paris market was supplied during the Middle Ages, and later in the sixteenth century, was made here and at Savignies, near Beauvais. Writers of that epoch make fre-

quent mention of the earthenware with reliefs glazed in rather light green, and especially in a smooth blue, made at La Chapelle-aux-Pots.

CHAPELLE-DES-POTS (LA), (Charente-Inferieure, France). In the fifteenth century there were at La Chapelle-des-Pots, at Brizambourg, and several other small places in the neighborhood of Saintes, manufactories of glazed pottery. The ware was quite coarse, but was not without originality. The decoration was in relief, usually glazed in yellow, green, or marbled. Clocks in the form of a woman in wide petticoats were a noticeable production.

CHAPELLE, JACQUES, demonstrator of chemistry and member of the Academy of Sciences, was called to direct the manufactory of Sceaux, founded in 1748 by De Bry, with whom he associated about 1750 in the manufacture of a fine decorated faïence. After a disagreement with his associate Chapelle ran the manufactory alone and greatly improved it. Eventually he sold it to Richard Glot. Although remarkable in every respect, the faïences of Chapelle have no mark.

CHAPELLE, STEPHEN and JAMES. Manufacturers of pottery at Leeds in 1840. (See Leeds.)

CHAUMIEL, Paris. Reproductions of old Brittany ware. The glaze and texture are well imitated.

CHAUMONT-SUR-LOIRE (Loire-et-Cher), France. The manufactory of faïence established in one of the dependencies of the Castle of Chaumont-sur-Loire is only known from the fact that Jean Baptiste Nini executed the greater part of his medallions in terra-cotta during his residence there.

CHELSEA CHINA COMPANY, New Cumberland, W. Va. The factory was erected in 1888 for the manufacture of earthenware. It was equipped with all modern appliances, but its capacity was not large enough to allow the output to yield a fair return on the investment, and it was closed down in 1896. The trademark was a crescent and a star. (See Crescent.) M 54.

CHELSEA, England. The names of the founders, the date when the works were started, even the site thereof, are largely a matter of conjecture. From advertisements in the newspapers of the period dating from 1747 some scraps of information have been gleaned. The first manager we have any knowledge of was Charles Gouyn, who was there in 1750, described as the "late manager," Nicholas Sprimont being the then director. But two milk jugs of the Goat-and-Bee pattern, often erroneously ascribed to Bow, are dated 1745, and are, in addition, the earliest dated pieces of English china known.

GOAT-AND-BEE CREAM JUG.

Sprimont carried on the factory with great skill and spirit and produced some really sumptuous pieces. The body was exquisitely soft and was revealed to advantage in the simpler styles and decorations of the early period. When Sprimont succeeded to the ownership and management of the works about the year 1749 he introduced several important changes, not only in the styles of decoration, but in the body itself, following the newly discovered practices at Bow of using bones in the body. George I. was much interested in the success of the works and brought workmen, molds and materials from Saxony to enable Chelsea to compete with Sèvres. From 1755 to 1759 were developed those exquisitely beautiful ground colors for which Chelsea is so celebrated —mazarine blue in 1755, turquoise blue and pea green 1756 to 1758, followed by the wonderful claret color (crimson) in 1759. Vases, snuff-boxes, services for the table, were enriched with these beautiful grounds, on which raised gilding was massed in superabundance. Gorgeously colored and richly gilt figures were largely produced from 1759 to the closing of the works. The various vessels in the form of plants and animals belong to the first period of the factory, 1745-56. They consisted of melons, pineapples, apples, lemons, oranges, cauliflowers, cabbages, artichokes, sunflowers, etc. Tureens,

CHELSEA VASE.

sauce-boats and dishes were made representing boars' heads, swans, ducks, partridges, hens, cows, sheep, goats, dogs and foxes. To the same period belong the lightly ornamented square and hexagonal cups and saucers and the white dessert dishes in the form of leaves, decorated with sprays of enameled flowers and chocolate colored edges. The prices realized at the auctions were not sufficiently remunerative to encourage the extensive outlay necessary to produce high-priced goods; the failing health of Sprimont and the competition of the Derby Factory, which had rapidly risen to prominence, were all factors which in 1770 culminated in the sale of the works, models, etc., to William Duesbury, of Derby. An anchor in relief in a raised oval is the earliest regular Chelsea mark, although the name "Chelsea" with an incised triangle and a date has been found on some pieces. Later the anchor was penciled in red, purple or gold, sometimes very roughly done, and varying considerably in size. M 55.

CHEROULION. A Greek vessel with two handles. The mouth was wide and gradually narrowed in to a small base.

CHERTSEY TILES. (See Tiles.)

CHERVETTE is the name given to pharmacy jars with a handle and generally with a short neck and a wide spout. They are used to hold syrups and oils.

CHETHAM & WOOLLEY, Longton. About 1795 they invented a new body they called pearl ware.

CHICANNEAU, or CHICOINEAU (Pierre), at the end of the seventeenth century founded at St. Cloud a manufactory of faïence. About 1696 he also succeeded in making soft porcelain, which, with the exception of the few pieces made by Poterat, was the first made in France. His son, who aided him in his researches, obtained May 16, 1702, letters patent that gave him for twenty years the exclusive privilege of manufacturing porcelain in France. (See St. Cloud.)

CHIGI, CARDINAL, established a works at San Quirico about 1714 with the idea of reviving the art of faïence painting. It was directed by Piezzentili, a painter who had given some time to the study of the works of Orazio Fontana. Terchi and Feschi, or Ferchia, also worked here, as did also Campani before going to Siena. The products of the works were not sold, but given as presents by the Cardinal.

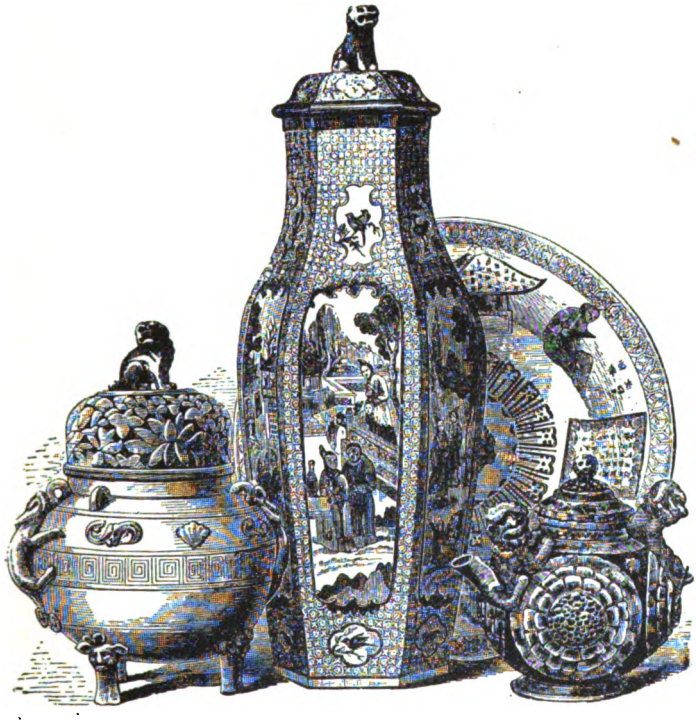
CHIKARA MORI, Mikawaji. A modern potter of Japan. (See Mikawaji.)

CHIKUSEN, GOGIOSAKA, Kioto. A Japanese potter of to-day, making fine porcelain.

CHILD, SMITH, made queensware at Tunstall in 1763. The mark was "Child," impressed.

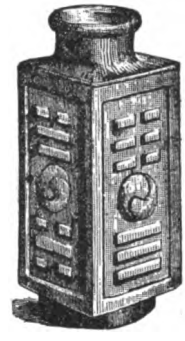
CHILI. (See Peru.)

CHINA. Mr. W. C. Prime, in his "Pottery and "Porcelain," says: "The more experienced judges of Oriental porcelain freely acknowl-



edge, in numerous colors and kinds, the impossibility of determining periods of manufacture, and it may well be doubted whether there is any person in China, Europe or America who upon examining specimens of certain exquisite colors can decide whether they are of the Ming dynasty or of the eighteenth century." To make this more interesting, Chinese authorities are agreed that during the Ming dynasty (1368-1647) all the old Chinese pieces were exactly reproduced. The Chinese claim that their records prove that they

made pottery 2698 B. C., and porcelain from 185 to 87 B. C. The discoverer of the latter is unknown. Without attempting to go into the matter, it may safely be asserted that both have a great antiquity, although we have older examples of Saracenetic pottery than at present we have of Chinese. The bulk of our information about early Chinese pottery is from Chinese sources, and, according to these, different colors may be assigned to these different dynasties. Under the Tsin dynasty (265-419 A. D.) the porcelain was blue in color; Soui dynasty (581-618), green was made, and an impetus was given to the art by the patronage accorded to the potters of King-teh-chin by the Emperor. The porcelains of Tch'ai made in 954 by his order were to be "blue as the sky after rain," but the color has not positively been identified. In after times so highly was it thought of that even fragments were carefully preserved and mounted as jewels. Sing-i and Sing-eul (which see) were celebrated potters of this time, and a little later (during the Song dynasty, 960-1126) came the venerable Chu and his lovely and accomplished daughter. (See Chu-ong and Chu-kiao.) Even at this early period we find they were already making reproductions of ancient art. In the Youen dynasty, Pong-kiumpas was a potter so celebrated for his reproductions of the Ting dynasty (618-907) that they were honored with the name of "New Vases of Ting." In the Ming dynasty all previous work seems to have been copied and reproduced. Not until the fifteenth century do we hear of porcelain decorated with flowers, landscapes, etc. In the Tching-te period (1506-22) the Chinese obtained from the Mahommedans the blue of cobalt, and its effect was immediately visible on their porcelain. It was at first so expensive that one ounce weight was worth two ounces of gold. It received the name of Hoei-tsing or Hoei-hoei-tsing, meaning "Blue of the Moslems of the barbarous Western countries," an example of the comprehensiveness of the Chinese language. During the Kia-tsing and Long-tsing period, Tsoui-hong, a celebrated imitator of old pottery, flourished. Tcheou-tan-ts-ouen, one of the most renowned potters in Chinese history, made imitations that deceived even the most expert from 1567 to 1619. At the same period Ou, the hermit, a poet and painter, retired to solitude and made eggshell china of great beauty—by a much more complicated method than that now in vogue—red, white and pale blue vases which he signed with his name. Many new colors were discovered from 1672 to 1735, and then followed (1735-95) the most brilliant period



VASE ORNAMENTED WITH THE TWO PRINCIPLES AND THE EIGHT TRIGRAMS.

of Chinese ceramic history, after which the art declined. The great porcelain-producing district of China is King-teh-Chin, where in a mountain of similar name the kaolin is found. This and petuntse are the sole ingredients of Chinese porcelain. The industry has existed there from 583 A. D. In 1717 3,000 kilns were in operation. The town was sacked during the Tai-ping Revolution, and the kilns destroyed, but it has since been rebuilt and the industry restored. There are other potteries at Canton, Ningpo, Nankin, Pekin and various other places. The decorations of Chinese porcelain are so bewildering in their variety that only a few of the principal ones can be briefly glimpsed at here; nor can they at all times be judged from Western standpoints. First come the brilliant enamels of great depth and beauty—blue, turquoise, red, yellow and celadon, peerless in their tone and brilliancy, and which at first were used only for grounds, but later were used in the decorations. Of celadon and crackle ware we have already spoken (see Celadon). The latter was an ingenious but utterly wasted display of ceramic skill. The Chrysanthemo-pæonienne is also treated of separately, and a curious mistake as to its nationality pointed out. The religious and emblematical figures of the Chinese are freely used in decorations, but, unmeaning as they appear, they have all a real significance. The familiar Kylin is often confounded with the Dog of Fo, which has its feet armed with claws, a grinning face, with sharp teeth and a curly mane, its general aspect being like a lion. The Dog of Fo is the habitual defender of the thresholds of temples and of Buddhist altars. Dragons of all kinds and the well-known Sacred Horse frequently figure. The Fong-hoang, an immortal bird, only approaches men to hail happy events. It is recognized by its carunculated head, its neck surrounded with silky feathers, and tail of pheasant and peacock. It was adopted by the emperors as their symbol, but later the dragon was substituted, and the sacred bird became the emblem of the princesses. The imperial dragon is armed with five claws. Paintings are not finished by one artist, but by a dozen or more, each of whom contributes his quota; and if our idea of perspective is outraged, their taste for the harmony of tints, which

is so important a feature in surface decoration, reconciles us to the whole. Nankin porcelain, painted in blue, with the Hawthorn pattern, was exported largely to Europe during the last century, and now brings high prices. A pair of Hawthorn jars were sold at Christie's, London, in October, 1897, for 1,200 guineas. It is probably not older than the sixteenth century and was made at King-teh-Chin, the port of export giving it its name. The Aster pattern was another very popular decoration in blue, and when reproduced by Minton in 1874 was an instantaneous success. But however admirable these blues were, they did not excel those of Enoch Wood and other Staffordshire potters during the first quarter of this century. The well-known Rose porcelain is so called from the back of the plate, etc., being covered with a beautiful rose color, which shines through the thin paste and gives a beautiful effect. Among the curiosities of Chinese porcelain, in addition to the crackle ware already noted, we may mention the reticulated work in plates and vases, "grains of rice," and other patterns being pierced in the ware and filled up with a transparent glaze. Moore, in "Lalla Rookh," alludes to a peculiar porcelain made by the Chinese which they call "Kia-tsing," which is white until filled with liquids, when fish or other ornaments are seen. Père d'Entrecolles says that in his day (1712) the art was lost, but he describes what he understands to be the process: "On the inside

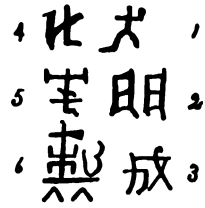


FIG. 2.

FIG. 3.

of a thin cup the ornament was painted, and then a very thin paste was laid over it, and over this an enamel. Then the outside was

ground off as thin as possible without touching the paint, glazed by immersion, and the whole then fired. Eggshell china was first made about 1425, and perfected about 1480. Chinese marks seldom refer to the potter or factory. We give two examples from Prime's "Pot-

HAWTHORN JAR.

tery and Porcelain." Fig. 2 is a mark of the Ming dynasty, and reads; 1, Ta; 2, Ming; 3, Ching; 4, Hwa; 5, Nein; 6, Che;—which is, in English; 1, 2, Great Ming; 3, 4, Ching-hwa; 5, 6, period made —or, "The Emperor Tchun-ti reigned 1465-87, and his reign was called the Ching-hwa period." Fig. 3 is a seal mark, and they are in cipher—that is, the characters are only used for that purpose, and the signs are of similar value to those in the 6 mark. When Chinese porcelain first reached Europe, as early as the twelfth century, by the Venetians, and later by the Portuguese and Dutch, it was regarded with something akin to awe, and many wonderful stories were told of its miraculous properties and the difficulty of its manufacture. As late as the sixteenth century Gui Panciroli, an erudite Italian

author, said: "Past generations had not seen porcelanna, which is really a mass composed of plaster, eggs, shells of marine locusts, and such like; this being well kneaded and mixed together is hidden in the ground by the head of the family, whose secret is known only to his children; and there it remains for eighty years without being brought to the light, after which his heirs remove it, and, finding it appropriate to some work, fashion it into those precious vases so beautiful to the eye in shape and color that architects cannot detect any defect in them. These vases have such wonderful properties that if poison be put into them they immediately burst asunder. He who has buried this matter never sees it again, but leaves it for his children, nephews or heirs, as a rich treasure, on account of the benefit they may derive from it, and much more valuable than gold." Owing to this general belief, it was the alchemist rather than the potter who strove to produce a material similar to that of which porcelain was made. Brief mention must be made of the celebrated so-called porcelain tower of Nankin, destroyed by the Tai-pings. It was built about 1403-1424, and was composed of bricks enameled on their exterior face. The surroundings of the openings were of porcelain, glazed with yellow and green, and ornamented in relief with figures of dragons. It was over two hundred feet high.

China Clay. The terms *china clay* and *kaolin* are usually used as synonymous, but as no kaolin is perfectly pure, it would perhaps be more correct to speak of kaolin as such before it is cleansed, and as china clay after it is washed and the impurities removed (see Kaolin). Porcelain was made in China as early as 206 B. C., or between that and A. D. 87. Therefore we must accept this as our first knowledge of china clay. In Europe it was first discovered at Aue in 1710; in France, by Brancras Lauraguais, near Alençon, in 1758; in England, by Cookworthy, in Cornwall, in 1755.

China Stone, or petuntse. An altered or decomposed granite. It is of a more complex constitution than kaolin, and varies more in its composition. It consists in great proportion of slightly altered feldspar, of a micaceous mineral, of silica in the form of quartz, and some kaolin.

Chineloff, in Poland. Cheap earthenware is made here.

Chittenango Pottery Company, New York. Established by Syracuse workmen and capitalists for the manufacture of china. The place was twice burned down, and after many trials the effort has been abandoned and the works converted into a manufactory of terra-cotta.

Chiu-Ko Karatsu. Ware made between the years 1600-1654,

the word signifying "Middle old Karatsu," of clay imported from Corea, especially for utensils to be used at tea ceremonies. (See Karatsu Ware.)

CHIUHEI HASHIMOTO. A Japanese potter. (See Banko.)

CHOISY-LE-ROI. There was a porcelain manufactory established here in 1785 by Clement. The productions were of mediocre character, and were marked with a stencil oval lozenge, with the inscription "CH. LE ROY." We have no precise information as to the founding of the manufacture of earthenware at Choisy-le-Roi, the end of the eighteenth or the beginning of last century. Mery, early in the century, improved the processes of color printing, as did also the brothers Paillard. Eustache Marie Joseph Bra, a sculptor and modeler, was employed there early in the century, and afterward went to Creil. Messrs. H. Boulanger & Co. have a large factory there under the control of the Comptoir Ceramique, and produce a large variety of decorated earthenware which is favorably known in this country. The large fountain they exhibited at the Paris Exhibition attracted deserved attention, as did also some beautifully painted tile panels. Many of their colored glazes are really charming. M 56.

CHRISTIAN PORCELAIN. So called from its being made in China and Japan for the Christians of Japan—first in Japan in the beginning of the seventeenth century, and afterward in China, about 1750. The early missionaries interfered with the decoration of porcelain, substituting Scriptural subjects for the native decorations, and the manufacture of this was prohibited in Japan.

CHRISTIANIA, Norway. Earthenware similar to that of Sweden is made here at the Egersunda Faïence Pottery, together with china decorated in the classical manner prevalent in the north.

CHRONOLOGICAL. Many of the early dates are conjectural; others are approximate. They are arranged in groups for greater convenience of reference.

B. C.		B. C.	
3000	Vases figured in Egyptian hieroglyphics.	700	Archaic Greek vases.
2696	Chinese pottery.	660	Japanese pottery.
1900	Egyptian blue figures.	400	Best period of Greek vases.
900	Samian pottery.	206	Chinese porcelain.
		27	Japanese pottery.

ENGLAND.

A. D.		A. D.	
40	Roman red ware in England.	490	Anglo-Saxon pottery.

ENGLAND.

A. D.
1214 Earthenware mentioned.
1250 Encaustic tiles.
1350 Green glazed ware.
1509 Costrels.
1560 Jackfield pottery.
1610 Bellarmines, or graybeards.
1610 Lead glazed ware.
1612 Earliest dated example of Wrotham slip ware.
1621 Staffordshire slip ware.
1634 Earliest dated example of Lambeth Delft.
1660 Fulham pottery.
1660 Tofts ware.
1671 Dwight's patent.
1676 Van Hamme's patent, Lambeth Delft.
1682 Marbled ware.
1688 The Elers in Staffordshire.
1691 John Wedgwood, Burslem.
1703 Bristol Delft ware.
1710 The Elers left Staffordshire.
1720 Flint used by Astbury.
1730 Josiah Wedgwood born.
1736 Liverpool Delft.
1740 Whieldon ware.
1744 Bow. Bones first used in china.
1745 Chelsea. Earliest dated example.
1750 Swansea pottery.
1750 Enoch Wood, the elder.
1750 Derby china.
1751 Worcester.
1751 Derby, soft porcelain.
1751 Caughley, Salop.
1752 Longton Hall china.

A. D.
1756 Liverpool china.
1756 Printing process.
1756 Lowestoft china.
1760 Leeds.
1762 John Turner, Longton.
1762 Wedgwood's queensware.
1768 Cookworthy, Plymouth, hard china.
1769 Chelsea Works bought by Duesbury.
1769 Wedgwood's Etruria Works opened.
1770 Josiah Spode.
1770 Job Meigh, Old Hall Works.
1770 Bristol hard china.
1776 Wedgwood's jasper.
1776 Bow Works bought by Duesbury.
1778 New Hall hard china.
1780 Coalport.
1780 Willow pattern produced at Caughley.
1788 Thomas Minton.
1790 Don Pottery, Swinton.
1790 Richard Abbey, Liverpool.
1790 Joseph Stubbs, Dalehall.
1794 Job Ridgway.
1794 John Davenport.
1795 Josiah Wedgwood died.
1809 Wedgwood's china.
1818 John Doulton, Lambeth.
1840 Minton's encaustic tiles.
1850 Parian.
1851 Herbert Minton died.
1863 Belleek.
1877 Doulton's, Burslem.

FRANCE.

A. D.

1510 Bernard Palissy born.
1524 Faïence d'Orion.
1540 Rouen faïence.
1550 Palissy ware.
1578 Nevers.
1589 Palissy died.
1664 Reverend's porcelain.
1673 Poterat's porcelain, Rouen.
1686 Moustiers.
1690 St. Cloud faïence.
1695 St. Cloud porcelain.
1696 Lille faïence.
1697 Marseilles faïence.
1709 Strasburg faïence.
1711 Lille porcelain.
1713 Sincenny.
1714 Bordeaux.
1725 Chantilly porcelain.
1729 Luneville.
1737 Sieur Massier, Limoges.

A. D.

1742 Niederwiller.
1745 Vincennes, soft porcelain.
1748 Jos. Boch, Lorraine.
1750 St. Amand.
1750 Aprey.
1756 Sèvres, soft porcelain.
1761 Sèvres, hard porcelain.
1770 Sarreguemines.
1773 St. Cloud manufactory burned.
1773 Brongniart died.
1774 Nancy.
1775 Montereau.
1782 Arras, soft porcelain.
1786 Vincennes, hard porcelain.
1797 Francis Alluaud, Limoges.
1820 Gien.
1839 D. Haviland went to Limoges.

ITALY.

1190 Sgraffiato.
1300 Castel-Durante, faïence.
1400 Luca della Robbia born.
1450 Pesaro, glazed ware.
1456 Luca della Robbia, first pottery.
1475 Faenza, earliest dated piece.
1477 Urbino.
1498 Maestro Giorgio at Gubbio.
1501. Diruta.
1507 Caffaggiola.
1509 Siena.
1519 First signed piece Maestro Giorgio.
1519 Venice, porcelain (no known example).
1521 Urbino, earliest dated piece.
1524 Castel-Durante, majolica.
1530 Francesco Xanto, at Urbino.
1542 Venice, glazed ware.
1580 Medici china.
1719 Venice, hard porcelain.
1735 Doccia, hard porcelain.
1736 Capo di Monti.

GERMANY AND AUSTRIA.

A. D.	
1539	Grès de Flanders, earliest dated piece.
1681	J. F. Bottger born.
1706	Bottger ware.
1709	Meissen, hard porcelain.
1718	Anspach, hard porcelain.
1718	Vienna, hard porcelain.
1720	Bayreuth, hard porcelain.
1740	Hochst, hard porcelain.
1747	Nymphenburg, hard porcelain.
1750	Berlin, hard porcelain.
1750	Furstenburg, hard porcelain.
1754	Frankenthal, hard porcelain.
1758	Rudolstadt, hard porcelain.
1758	Ludwigsburg, hard porcelain.
1766	Septfontaines.
1801	Fischer & Meig, Pirkenhammer.
1841	Villeroy & Boch.
1856	Vienna Works closed.

SPAIN.

1200	Pottery in Valencia.
1235	Hispano-Moresque.
1320	Alhambra vase.
1759	Buen Retiro.

HOLLAND.

1600 Delft ware.

DENMARK.

1772 Copenhagen.

SWEDEN.

1727	Rorstrand.
1731	Stralsund.
1758	Marieburg.
1827	Gustafsburg.

RUSSIA.

1744 St. Petersburg.

CHINA.

583	Blue porcelain ordered as tribute.
618	White china (Thang dynasty).
954	Sky-blue porcelain.
1107	Magistrates' porcelain
1368	Finest porcelain (Ming dynasty).
1426	Dark blue.
1573	Sang de Bœuf.
1661	Celadon.
1723	Rose back.

JAPAN.

550	Wheel-made pottery.
1230	Glazed pottery.
1513	Porcelain.

UNITED STATES.

A. D.
1689 Pottery at Burlington, N. J.
1750 Pennsylvania Dutch, tulip ware.
1770 Bone china, Philadelphia.
1796 Earthenware and stoneware. Charles Lothrop, Norwich, Conn.
1796 John Crolius, New York.
1800 Perth Amboy, stoneware.
1820-5. Hard porcelain, Philadelphia.
1825. Jersey City Pottery.

A. D.
1827 Jabez Vodrey, Pittsburg, Pa.
1834 First factory in East Liverpool, Ohio.
1846 Bennington, Vt.
1848 Greenpoint, N. Y.
1852 Taylor & Speeler, Trenton, N. J.
1853 W. Young & Sons, C C ware, 1853.
1856 Taylor & Speeler, white ware.

CHRYSANTHEMO-PÆONIENNE. Japanese ware, so called from the prevalence of chrysanthemums and peonies on the ground. The chrysanthemum is the badge of the Empire of Japan. This ware was by M. Jacquemart ascribed to China. Mr. A. W. Franks says: "It is much to be regretted that the Japanese have been so much in the habit of inscribing on their productions the Chinese dates, which has been done without the slightest regard to the age of the specimens. The Chinese dates 'Seuen tih' and 'Ching hwa' are both to be found on Japanese porcelain, though both of them had passed away before the art of making porcelain had been introduced into Japan." It was these dates which led M. Jacquemart into the error of attributing to the Chinese the large class of porcelain which he has termed "Chrysanthemo-pæonienne," and which he should at a glance have seen to be totally different from the productions of the celestial empire.

CHU-ONG (the venerable Chu) and his daughter, Chu-kiao (the pretty Chu), perhaps the most celebrated of Chinese ceramic artists. The father excelled in curious objects, birds, beasts, etc., while the daughter, who excelled her father, produced exquisite work of all kinds and in all colors. They lived in the Song dynasty (960-1126).

CHURCH GRESLEY, Leicestershire. A china factory was established here in 1795, on ground adjacent to Gresley Hall, by Sir Nigel Gresley. Workmen from Staffordshire were employed; the best available artistic talent secured, including Mr. Coffee, of Derby, a skilled modeler, and a high order of merit was aimed at. In 1800, in consequence of heavy losses, the works were ceded to William

Nadin, who operated them till 1804, from whom they passed into the hands of a company, which failed in 1808, and the "China House" was pulled down. Warping of the pieces during firing was the chief difficulty experienced and was never entirely overcome. An order from Queen Charlotte with *carte blanche* as to cost was never executed. But very few specimens are known.

CHYTRIA. A Greek vessel with two handles, used for warming food.

CINCINNATI, Ohio. Here is situated the Rookwood Pottery (which see) and the Brockman Pottery Company. The Cincinnati Art Pottery Company was organized in 1879, and produced Barbotine, imitation Hungarian faïence, what they termed Portland blue faïence, and an ivory ware decorated with gold scrolls and chrysanthemums. The Avon Pottery Company, under the direction of Matt Morgan, made imitations of Rookwood and faïence in low relief with Moorish designs. Both had a very brief existence.

CIRON CIQUAIRE. Founder of the Chantilly China Works in 1725. (See Chantilly.)

CITY POTTERY, Trenton, N. J. The first pottery in Trenton fitted up for the manufacture of white granite and cream color (1859) by Rhodes & Yates. It had previously been occupied by William Young & Sons, manufacturing hardware trimmings; and by James & Thomas Lynch (1856-8) as a drain-pipe works.

CLARKE, WILLIAM, of Newcastle, Staffordshire, migrated to France, and after having experimented at Lille and other places settled at Montereau to manufacture English earthenware. In 1775 two ordinances granted to them several privileges, and for many years they were in receipt of an annual subsidy of twelve hundred francs. A branch of the same factory was subsequently established at Creil, and both branches have continued to prosper until the present day. (See Creil.)

CLEFFIUS, LAMBERTUS. Master potter of Delft. He purchased from J. Van Kessel the works known as the Metal Pot. In 1678 he published in the *Haarlem Gazette* that he had discovered the way to reproduce Indian porcelain. He died in 1691. His mark was the letters C. L. in a rough monogram.

CLEMENT. (See Choisy-le-Roi.)

CLEMENTSON, JOSEPH. In partnership with a Mr. Reed he started business as an earthenware manufacturer at Hanley in 1832, and soon afterwards assumed entire control. In 1856 he purchased the Bell Works, formerly operated by William Ridgway. He catered chiefly to the English colonial market. He died in 1871, and the

business is continued by his four sons under the style of Clementson Brothers. M 57.

CLERISSY (Clericy or Clerici). There are several ceramists known by this name. First, Antoine Clerici, who obtained letters patent to found a royal glass works in 1640, to which was added a manufactory of articles of clay. Second, Antoine Clerissy, whose name is found on a dish in the collection of Davillier representing a lion hunt, marked "A. Clerissy, a Saint-Jean de Dezert, a Marseille 1697." His name again figures at Moustiers March 26, 1704, on the occasion of the baptism of his son Pierre. Third, Pierre Clerissy, or Clericy, who belonged to a well-known family of potters, and who established the first manufactory at Moustiers toward the end of the seventeenth century. His name is in the Moustiers parish registers in 1686, where he is designated "master potter" and later as "merchant potter." He died August 25, 1728, aged 76 years.

CLERISSY, PIERRE (II.), born in 1704, became in 1728 the successor of his uncle of the same name. He was ennobled by Louis XV. in 1743, and made a magistrate of the "Parlement" of Provence. He took as a partner in his works Joseph Foulque, a skilful decorator, to whom he sold his manufactory, which remained the most important one of its kind in Moustiers or its vicinity.

CLERMONT-FERRAND (Puy-de-Dome). But little is known of the faïence manufactory established in this town and directed by one Chandessolle. There are, however, some pieces of faïence decorated in rather dark blue in the style of Moustiers, of remarkable execution, that bear the dates 1734, 1735 and 1738. They are very rare and probably date from the beginning of the manufactory's existence, and in purity of enamel and delicacy of decoration equal the productions of Moustiers. There was also at Clermont-Ferrand a manufactory of pottery glazed in dark brown in the style of Avignon, but little is known of it. In the last half of the past century at Clermont-Ferrand and its vicinity coarse faïence was made—dishes and plates—with the reverse brown or black, and commonly known under the name of *"culs-noir."*

CLEWS, JAMES, succeeded A. Stevenson at the Cobridge works (which see) in 1818. About this period the Staffordshire manufacturers were producing a great number of American historical plates, commemorative of the struggle for independence and other important events. A beautiful deep and rich blue, common to all producing these wares, was used, the plates were very deeply engraved, and the mass of color they carried produced a very brilliant result. Those of Clews were extremely popular, especially the Lafayette series and

"STATES" DISH.

the "States" design, an illustration of which we give. Clews failed in 1829, and in 1836 came to America. He succeeded in interesting some Louisville capitalists, and a manufactory was built at Troy, Ind. The failure of the venture has been put down to the non-stability of the workmen, without much corroborative evidence; but there were certainly other causes. A disease resembling yellow fever almost decimated the little force, and it was difficult to replace it. There seems reason to doubt whether Clews was really the practical man he represented himself to be. The difference between taking new materials and using those which had stood the test of years, and producing good pottery therefrom, is at any rate strikingly exemplified in the case of Clews, as the venture ended in ignominious failure. Clews returned to England, and the works were shortly afterward abandoned. M 58.

CLIFF, W. D., manufacturer of earthenware, Hanley, Staffordshire. He purchased the works of the defunct firm of J. Dimmock & Co. M 59.

CLIGNANCOURT, a manufactory of hard porcelain founded by Pierre Dereulle, who obtained the patronage of the Comte de Provence, afterward Louis XVIII. It produced the finest of all the Parisian china; and although the privilege of using gold in the decoration of china was confined to Sèvres, the private manufactories did not hesitate to infringe the rule, and also copied the Sèvres shapes and decorations—even the mark itself. The original mark was a windmill, coarsely sketched in blue under the glaze, which was changed to the Count's initials, L. S. X. (Louis Stanislas Xavier), sometimes surmounted by his crown, or by the letter M (for Monsieur, the title of the king's brother) and a crown. At one time it was attempted to imitate the interlaced L's of Sèvres.

surmounted by a prince's crown instead of the royal one, but this was suppressed by the authorities. M 60.

CLODION, CLAUDE MICHEL. A skilful modeler, born at Nancy in 1738, died in Paris March 28, 1814. He produced many charming pieces for the Nicholas Lelong Factory at Nancy (founded 1774), and which are to-day worth their weight in gold. He also furnished models for the Sèvres Works.

CLOISSONNE ENAMEL. On porcelain, this is chiefly to be regarded as a curiosity, as the same effects are much more easily produced on metal. Fine metallic lines are fixed in position on the ware, to which they are fastened by a strong cement. In the interstices thus created are poured vitrifiable enamels of various colors, and the whole is then fired. It usually requires three or four firings before sufficient enamel can be applied to present a level surface. The work is principally carried on at Owari, Kioto, Osaka and Tokio. Mintons, of Stoke-upon-Trent, on a porcelain base, have successfully produced these cloissonnes.

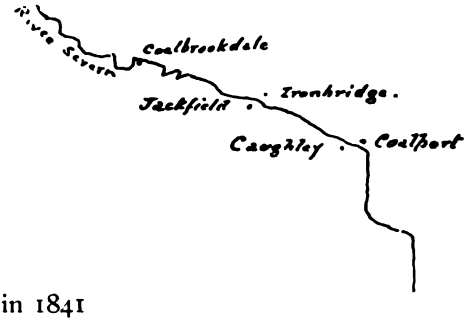
COADES. Works were established in Lambeth about 1760 by the Misses Coade for the manufacture of vases, statues and architectural enrichments. Many celebrated modelers were employed, among them being Bacon, Flaxman, Banks and Penzetta. The rood-screen at St. George's Chapel, Windsor; the statue of Britannia on the Nelson Monument at Yarmouth; the bas-relief over the portico of Greenwich Hospital, the latter, designed by Benjamin West, were executed at these works. They were closed in 1840, and the molds, etc., sold to other manufacturers.

COAL was first used in France in firing china at Lille, in 1785; at Mettlach, Germany, in 1809.

COALBROOKDALE, Salop, England. There is a manufactory of terra-cotta here. It is frequently alluded to as if identical with Coalport. For a short time the Coalport Works were known as Coalbrookdale. (For map see Coalport.)

COALPORT. Some time previous to 1798, John Rose, who had been apprenticed to Turner, of Caughley, started a small works at Jackfield, but soon removed to Coalport, where he occupied a small works which had been carried on by a Mr. Young, a mercer of Shrewsbury, and which still form a part of the works. The Caughley Works do not seem to have been able to stand Mr. Rose's opposition, and in 1799 Mr. Turner retired and sold the works to Rose, who continued manufacturing at both places until 1814 or 1815, when the Caughley plant was removed to Coalport. The Coalport Works were for a short time known as Coalbrookdale, and this has appar-

ently led to some confusion. A rough sketch map of the district will serve to elucidate matters. Early in 1800 the works were considerably enlarged, the business steadily increasing, the products being already favorably known. In 1820 Mr. Rose acquired the Swansea Works, and a little later those of Nantgarw, the molds, patterns and workmen of both establishments being removed to Coalport. John Rose died in 1841 and was succeeded by his nephew, W. F. Rose, who retired from the firm in 1862 and died two years later. He had started a small works at Hanley and others in Derbyshire, but neither of them was successful. Mr. Pugh succeeded him, and following his death the estate was thrown into Chancery, a good deal of litigation followed, and the works were eventually purchased by Mr. Bruff, a London barrister, who still continues them, under the management of Mr. J. J. Bott. Since the inception of the works the firm has always been J. Rose & Co., though there were numerous changes in the ownership. The following are the successive partnerships; John Rose & Co., Rose & Blakeway; Rose, Blakeway & Rose; Rose, Johnson & Winter; Rose, Johnson, Clarke & Winter; Rose, Winter & Clarke; Rose, Clarke & Madison; Madison, Pugh, Rose & Rose; W. Pugh and W. F. Rose; W. Pugh; —— Bruff. China only has been produced at the Coalport Works, and from the first a remarkable success was assured. In 1820 a gold medal was awarded Mr. Rose for his improvements in the manufacture of china glaze—a glaze without lead. The exhibitions of 1851, 1862 (London), 1855 (Paris), and later ones, all awarded medals, the products ranking equal to the best in England. Rose du Barry, Sardinian green and other elusive colors were realized here in the greatest perfection. Billingsley, the flower painter; John Randall, R. F.



VASE BY RANDALL.

Abraham, Birbeck, Cook and J. Hartshorn were some of the artists who employed their talents in decorating an almost unlimited number of finely modeled vases. The beautiful colored grounds and rich gilding of the Coalport of to-day are well known, and under the present able management the well-deserved reputation of the works is worthily sustained, the body retaining all those characteristics which have in the past made it synonymous with all that indicates careful workmanship and a thorough knowledge of the art. M 61.

COALPORT VASE.

COBALT. In the varied forms of oxides in which it is divided this is one of the chief factors in the development of the potter's art. It is used as a stain for bodies and as a base from which many lovely colors are made. It was first discovered by some miners in the Hartz Mountains of Germany, who called it "Kobold," the Teutonic name for gnome or goblin. Since then it has been discovered in Norway, Sweden, Bolivia, Missouri (U. S. A.), and in the Transvaal. It was not until about 1720, at Meissen, that it was

applied to pottery, and even then it was some years before it attained anything like the perfection it has since attained. The Chinese first acquired the use of it from the Arabs.

COBLENTZ, Germany. Gray stoneware with blue ornaments, known under the name of "Coblentz stoneware," was made here and sold in great quantities in Holland towards the end of the last century.

COBRIDGE. A district in the Staffordshire Potteries, lying midway between Hanley and Burslem. Here are situated the works of Furnivals, the Brownfield Guild Pottery, H. Alcock & Co., Yates & Bamford, the Porcelain Tile Company and Banner & Co. (sanitary). It has a station on the North Staffordshire Railway, and the post town is Stoke-upon-Trent.

COBRIDGE WORKS, Cobridge, Staffordsire. According to Chaffers, these works were started by Stevenson & Dale in 1780 and that in 1815 it was A. Stevenson. Jewett gives the date of erection as 1808, by Bucknall & Stevenson, who were succeeded by A. Stevenson. He occupied them until 1818, when they passed into the hands of Ralph and James Clews, the latter taking over the works a little later. Stevenson must have taken another factory, or Clews continued to use his old impressed stamp, as designs relating to the year 1824 bear this stamp: "A. Stevenson. Warranted Staffordshire." Clews produced a large number of what are now termed "American historical plates," finely engraved and printed in a deep, rich blue. Among these may be mentioned the Lafayette series, which must have been very popular. He failed in 1829, and later came to this country (see Clews). The works were closed until 1836, when they were taken by Robinson, Wood & Brownfield. Mr. Robinson died the same year, and in 1850 Mr. Wood retired, the remaining partner William Brownfield assuming entire control. In 1871 he admitted his son, W. E. Brownfield, as a partner, and the firm became W. Brownfield & Son. The elder Brownfield died in 1873. Under the management of Mr. W. E. Brownfield the productions of the factory took a large extension. Mr. Jahn, a talented artist and figure-painter, was engaged as art director, the influence he exerted made itself quickly felt, and the pottery produced excellent bodies both in china and earthenware. Nor were the decorations subordinate. Their "Sylvan" dinner service was a decided departure from their existing patterns and was the pioneer of a host of similar ones, none of which approached it either in merit or popularity. A few years ago the then proprietor, W. E. Brownfield, decided to try the experiment of a purely cooperative pottery, and accordingly the

business was reconstructed and was carried on under the style of the Brownfield Guild Pottery. They continued to manufacture both china and earthenware of a high grade, but the cooperative principle did not prove as successful as its promoters anticipated, and the works were closed. They have since been reopened by Wood & Brownfield. M 62.

COCHRANE, R., & Co., Britannia Pottery, Glasgow, manufacturers of earthenware. One of the oldest potteries in Glasgow, specimens of their manufacture extant being over two hundred years old. M 63.

COCK PIT HILL POTTERY, Derby, England. Slip ware was made here in the first quarter of the eighteenth century.

COFFEE POTS were first made in Europe at the end of the seventeenth century.

COFFINS. "At Warka, probably the ancient Ur of the Chaldees, Mr. Loftus discovered numerous coffins or 'sarcophagi piled one upon another to the height of forty-five feet, of peculiar form and made of terra-cotta glazed with a silicious glaze of bluish green color. They were formed somewhat like a shoe, an opening being left at the upper and wider end for the insertion of the body, and closed by an oval lid, which, as well as the upper part of the coffin, is ornamented with figures and plants in relief. They are supposed to be of the Sassanian period."—*C. Drury E. Fortnum.*

COGNAE, Charente, France. Faïence similar in style to that of Nevers was made here towards the end of the eighteenth century, and is chiefly remarkable in that it depicts the local manners and customs of the time.

COIMBRA, Portugal. There is a pottery making black ware here.

COKE, JOHN, established the china factory at Pinxton in 1795, made celebrated by Billingsley. It was closed in 1812. (See Pinxton.)

COLLIN. A painter employed by Deck, of Paris.

COLLINOT, of Paris, has a manufactory in the Parc des Princes (Bois de Boulogne), where he produces vases, wall tiles, etc., ornamented with Persian and Japanese designs of pure style and workmanship, under the artistic direction of Adalbert de Beaumont. He has succeeded in realizing some excellent colors, notably a rich purple.

COLOGNE. This was the center of the manufacture of stoneware, the end of the sixteenth and the beginning of the seventeenth centuries, usually known as "Grès de Flandres." (See Grès de Flandres.)

COMBED WARE. Made at Burslem the latter half of the seven-

teenth century. Alternate layers of red and white slip were laid on the ware and then combed with a wire brush or coarse comb and glazed with powdered lead.

CONRADE, THE, Nevers, France. The date of the establishment of the manufacture of faïence at Nevers is uncertain. The first authentic reference is in 1608 and refers to a manufactory situated in the Rue St. Genest, belonging to two Italians, the brothers Conrade, who came from Savona, Italy. Whether they founded the industry is a matter of doubt, but if it existed they certainly brought with them a new style of decoration. The shapes retained their Italian character, but blue camaieu was substituted for the polychrome decorations of Faenza. Italian ornament was mixed up with figures, flowers, etc., from Chinese porcelain. Dominique Conrade became a naturalized French subject and settled at Nevers. His son Antoine, who succeeded him, was made manufacturer to the king. In 1672 his grandson, also named Dominique, was enjoying the title of *Maistre Faiencier ordinaire de Sa Majeste,* and he appears to have been the last of the family who for three successive generations had "carried on an industry whose importance soon grew considerable, whilst its influence on the manufacture of Nevers faïence is incontestable." M 64.

CONTA & BOEHM, Possnick. Established 1798, and now employing seven hundred hands. They make a large variety of ornamental goods, figures, candelabra, etc. M 65.

CONVENT OF GRATITUDE. The Chinese name (Poa-enssi) for the famous porcelain tower of Nankin.

COOK POTTERY COMPANY, Trenton, N. J. Successors to Ott & Brewer. Earthenware, semi-porcelain and Belleek ware. M 66.

COOKSON & HARDING were potters in Staffordshire toward the close of the eighteenth century.

COOKWORTHY, WILLIAM. (See Plymouth.)

COPELAND. The present firm of W. T. Copeland & Sons was founded by Josiah Spode in 1770 at the works at Stoke previously carried on by Banks & Turner. Shortly afterward he took into partnership a traveler named William Copeland. The first production was a good earthenware body with printed designs in Oriental style. Spode's training under Whieldon enabled him to personally attend to the mixing of bodies, glazes, etc., whilst at the warehouse they had established in London Mr. Copeland made an efficient salesman. Spode died in 1797, and was succeeded by his son, also named Josiah, who three years later added to their productions the manufacture of china. Copeland died in 1826 and Spode in 1827.

and the business devolved on their sons, W. T. Copeland and Josiah Spode the third. The latter died in 1829. Mr. W. T. Copeland was an alderman of the city of London, and was always familiarly and lovingly spoken of as "the old Alderman." He sat in Parliament for Coleraine and also for Stoke-upon-Trent at various periods. In 1833 he admitted Thomas Garrett as a partner, but he retired in 1847. From this year Mr. Copeland carried on the business alone until 1867, when he admitted his four sons as partners, and they now carry on the business. The products of the manufactory are extremely varied, ranging from their well-known ivory tinted earthenware to the finest china. In celebration of its centenary Messrs. Copeland in 1897 revived Spode's Tower pattern in zaffres blue. This pattern was originally engraved by Daniel Greatbach, who died at an advanced age some forty years ago. It is a very interesting memento of a period of which we have but scanty information. In 1805 Spode introduced an opaque porcelain known as "ironstone china"—a very marked improvement over the softer earthenware then manufactured. In 1845 they succeeded in producing an entirely new body, which from its resemblance to Paros marble they called Parian. It is composed of three-fifths of china stone and two parts of feldspar. It proved a great success, its purity making it specially adaptable to the reproduction of classical figures. In tiles formed into friezes, and decorated with boldly painted landscapes and figures, they were particularly successful, employing such artists as Hurten (flowers), Abraham, Besche and Hewett (figures), and Yale (landscapes). Of Messrs. Copeland's tiles Marryatt writes: "Before we quit the subject of English pottery we must draw attention to the ceiling of the new reading-room now (1868) in course of construction at the

SPODE'S TOWER PATTERN.

Imperial Library at Paris. That the ceiling of the domes was intended to be composed of e. w. slabs was part of the primary design, and Continental Europe was explored in vain for potters willing to undertake a task so collossal. The Dutchmen confessed that such tiles were beyond their ken; the Chinamen who covered the Porc. Tower at Nankin were not available, and even Sèvres shrank from the undertaking. At length Messrs. Copeland expressed their willingness to grapple with the difficulty. There are nine cupolas lined with painted slabs *all on the curve,* and each cupola contains 4,000 slabs. These 36,000 tiles have been fitted with a dexterity and faultlessness of finish which is only to be attained in English workmanship. The artistic decoration of the slabs is on a par with the excellence of the pottery, and the effect of the whole is wonderfully light, graceful and airy." In jeweled china Messrs. Copeland excelled Sèvres, inasmuch as theirs was a much more ceramic production. With the addition of Mr. Samuel Alcock, a very delicate figure painter, Messrs. Copeland may reasonably be proud of the staff of artists associated with them. Mr. R. F. Abraham was the art director for a number of years and up to the time of his death in 1896. M 67.

COREA. The peninsula of Corea, situated between China and Japan, was alternately under the domination of these two countries. It long produced porcelain attributed to both China and Japan—caused through the Corean practice of decorating the ware according to its destination. The decorations were entirely conventional forms, either floral or animal, and the colors were limited to red, black, pale shades of green, and yellow and gold. The kilns were of peculiar construction, being built on the side of a hill, with a length of 150 to 200 feet, and a height of five feet in the center, of vault-like form. The wood for firing was thrown directly into the kiln, the inside of which communicated with the outer air by means of openings in the side wall. No saggers were used, and in consequence of the uneven distribution of heat the losses were very great. In 1592 the Prince of Satsuma, Shimadsu Yoshihisa, invaded Corea and took home with him a number of porcelain makers and their families. After numerous experiments they succeeded in producing the ware now known as Satsuma. Until within the last few years they were interdicted from marrying with the Japanese, and retained their language and customs. They number about 1,450 and are all engaged in pottery making. Corea has long ago ceased to make any porcelain.

CORK & EDGE. (See Edge, Malkin & Co.)

CORN, W. & E. Earthenware manufacturers, Burslem, England. M 68.

CORNE, A LA. (See Cornucopia, à la.)

CORNELISZ (surnamed Schipper, boatman), a master potter established at Delft in 1628. Pieces decorated with Chinese motives in camaieu blue marked "C" are attributed to him.

CORNUCOPIA, A LA. A decoration brought into style at Rouen, France, during the last period of the existence of the Norman factory. It was very popular and was produced in endless varieties. The pattern consists of a cornucopia from which are showered flowers, principally carnations; birds, butterflies and insects, painted in brilliant colors, red and yellow predominating.

CORNWALL. A county in England, situated in the extreme southwest, rich in china clay and china stone, used not only in making English, but (in smaller quantities) American pottery.

COROADOS. A tribe of native Brazilians on the banks of the Parahiba River, who used earthen jars for the reception of mummies of their chiefs.

CORRUGATED WARE. Prehistoric pottery, formed by drawing the clay into strips and then winding them spirally, pressing each layer down upon the one beneath it, until the whole vessel was built up. The outside was smoothed with a stick, the strips being worked so well together that no joint is visible. It was largely made by Pueblo Indians, and has also been found in Utah. The Indians made it in New Jersey, Pennsylvania, Delaware, Georgia and Florida. In South America it was made by the tribes on the Araguaya River and those of the Orinoco section. The process is still in use in modern Indian pottery.

COSIGN, ARENDT. Master potter of Delft, where he founded in 1675 the celebrated manufactory of the sign of "the Rose."

COSTRELS. An oval flattened bottle with a small neck and foot and a few loops for suspension by means of a leathern thong. Were made in England by the monks and are contemporary with the encaustic tiles of the thirteenth to sixteenth century.

COTTON & BARKER, Burslem, Staffordshire. Manufacturers of printed earthenware, probably about 1846-1850. M 69.

COUDRAY BARBE. The widow of Chicanneau, afterward married to Henri Trou, of the St. Cloud factory.

COURCELLES, France. G. Forterie, a surgeon, made pottery here. A puzzle jug is inscribed "Forterie père, ancien chirugien à Courcelles, 1789."

COURTILLE, LA. A china manufactory founded in 1773 by Jean Baptiste Locre which originally imitated German china and was at one time known as the "*Manufacture de porcelaine Allemande,*" and in order to more closely imitate the Meissen ware adopted as a mark two crossed torches, which were later changed to two ears of wheat. The works afterwards passed into the hands of Pouyat, of Limoges. (See Pouyat.) M 70.

COXON & Co., Trenton, N. J. Founded in 1863 by Charles Coxon, who was succeeded by his widow, J. G. Forman and S. M. Alpaugh.

COXSIDE, near Plymouth. The site of Cookworthy's china works.

CRACKLE. A decoration employed on old Chinese ware as early as A. D. 960, consisting of an inextricable network of cracks, such as would arise from a glaze being softer than the body, or the reverse, and to which we should apply the term crazing. It is valuable only as an example of Chinese ingenuity, for the crackle or crazing was not the result of poor potting or of accident, but was obtained with so much precision that the size of the crackle could be exactly regulated. Moreover, the glaze of Chinese porcelain is in such close affinity with the body that crazing is impossible, so it was only by artificial means that the desired result could be obtained. Many theories have been advanced as to the process employed, one of which is that steatite was mixed with the glaze and that the piece before firing was exposed to the sun, which caused the glaze to craze. Red pigment or black Chinese ink was then rubbed into the cracks to accentuate them, and the piece was then fired. Or the glaze was mixed with materials destructive to its close affinity to the body, and even shrinkage being thus made impossible, crazing or crackle was the result. But none of these theories explains how the size of the crackle could be regulated.

CRADLES were made in Staffordshire the commencement of the eighteenth century in slip ware, salt glaze and cream color. They seem to have been peculiar to the Potteries district.

CRANE. The Japanese emblem of longevity, and used extensively by them in the decoration of pottery.

CRANE, WALTER, the well-known book illustrator, has made a number of designs for pottery which have been executed by Messrs. Maw & Co., principally for interiors he had decorated, thus producing a perfect harmony. Whilst graceful in form and attaining precisely the effect he wished to produce, it cannot be classed among the foremost of the works of this versatile artist.

CRAVEN, DUNNILL & Co. (See Jackfield.)

CRAZE. A minute crack in the glaze, caused by a quicker contraction of either glaze or body when the two do not represent perfect unity.

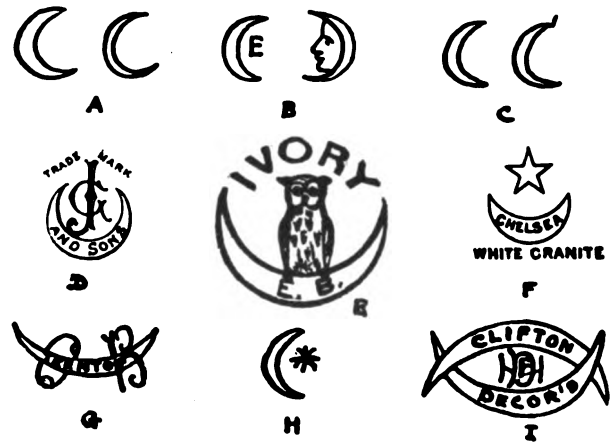
CREAM COLOR. The appellation *cream color* was first bestowed on earthenware with a yellowish white glaze by Thomas Astbury (1725). Wedgwood's "queensware" was but an improved form of this. Enoch Wood in a memorandum at the back of a dish of Wedgwood make says: "It is my brother William's modeling. It was turned on a hand lathe, as plates were at that date (1772). I preserve this to show the quality of common cream ware before the introduction of growan or Cornwall stone. This body is formed of flint and clay only, the same as used for salt glazed ware at that time, and flint and lead only instead of a salt glaze, and it is fired in the usual and accustomed way and manner as usual for glazed teapots, tortoise-shell, mottled and agate and cauliflower, etc. Also sand from the Mole Cop (?Mow Cop), and Baddeley Edge was used either in the body or glaze. N. B.—Before flint was introduced they used a certain proportion of slip for the body in the glaze to prevent crazing, and to make it bear a stronger fire in the glaze oven." The cream color ware of Leeds of ten or twelve years later was made from tobacco pipe clay from Wortley, near Leeds, ground flint and Cornish china clay, the yellow color being only in part due to the lead glaze. The cream color ware of to-day, whether of foreign or home manufacture, is a commercial article calling for no mention.

CREIL. The manufactory here was an offshoot of that of Montereau, founded about 1780 by English potters. It was transferred to Lebauf, Milliet & Co., probably about 1810. A hybrid porcelain was made until 1860, after which the business was restricted to earthenware. Like other French earthenware factories, for false economic reasons the products fell into disrepute some twenty years ago, and they had but recovered their lost prestige when the Comptoir Ceramique transferred the business to Montereau. Printing was adopted very early in this century, and services representing the principal events in French history, La Fontaine's Fables, views of Paris and of Italy, were largely produced. M 71.

CRISPE, OF BOW CHURCHYARD, London, is said to have had a manufactory of chinaware at Lambeth in the middle of the last century, and to him John Bacon, the sculptor, is said to have been

apprenticed in 1755. But little is known of this manufactory of Crispe's.—*Jewett.*

CRESCENT. The crescent was used as an early mark on old Worcester china. It is found not only on the productions of the old Worcester period, 1751-1783, but also on pieces made from 1793 to 1840. Messrs. Chamberlain also used it from 1783. It is also sometimes found with the addition of an E. The crescent is the true Worcester mark, being taken from the quarterings of the Warmstry Arms. The open crescent is usually in blue underglaze, occasionally in red or gold (A). The others are generally found on pieces of underglaze blue printing (B). Caughley from 1772 until 1799 occasionally used the same mark, which was continued at Coalport, but it eventually developed into a C (C). It is also used by George Jones & Sons,



Stoke-upon-Trent, in connection with a monogram (D); by Edwin Bennett, Baltimore, Md. (1886), in connection with an owl (E); the Chelsea China Company, New Cumberland, W. Va., 1888-96 (F); Ott & Brewer, on Belleek ware (G); interlaced on the famous faïence d'Orion (I); Hadji Minas, a modern Turkish potter (H); and D. F. Haynes, Baltimore, Md. I have also seen it used, together with their trademark, on a blue print by Doulton.

CREUSSEN, Bavaria. During the seventeenth and at the beginning of the eighteenth century earthenware was made here of a brown paste glazed in black or decorated with figures in relief, armorial bearings or ornaments painted in opaque, colors often crude and having the appearance of oil colors inartistically applied. The best known specimens are some cylinder tankards on which are

represented figures of Christ and the Apostles, named for this reason *Cruches des Apotres*—Apostles' pitchers.

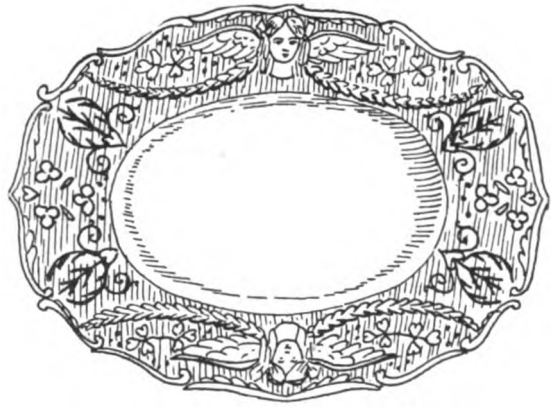
CROCKERY. A general term for anything made of earthenware and fired. The Anglo-Saxon word "cruce" signified a pot or pitcher. In the Middle Ages a potter was termed a crocker, and the Welsh term is still *crocenyz*. The term may be accepted as in contradistinction to china or porcelain.

CROISIC, LE (Loire-Inferieure), France. As early as the sixteenth century Croisic possessed a faïence manufactory founded by Gerard Demigennes, of Flanders, and later under the direction of an Italian, Horatio Borniola. The ware was heavy and common, white and decorated with garlands and flowers in blue and citron yellow.

CROLIUS, New York. At the end of the eighteenth century, right in the middle of the street where the new Hall of Records is in process of construction, stood the stoneware pottery of John Crolius, whose house was at 215 Greenwich Street. His son Clarkson lived, according to the directory for 1794, at 10 Cross Street, number 9 being occupied by John Remmey, both being described as stoneware potters of Potters' Hill. But the directory makes no mention of any partnership. The only evidence of this partnership seems to be a map of New York, published in 1813, as it was in 1742-4, according to the memory of some one alive at that date, and on which the pottery of "Remmey & Crolius" figures. So we think it reasonable to suppose that two potteries were carried on, one by Crolius and the other by Remmey. In the directory for 1796 neither name appears. In Hutchins' map of the Collect Pond published in 1846, Potters' Hill at the juncture of Reade and Cross streets is clearly indicated, with two buildings on the top of the hill. Clarkson Crolius succeeded his father, and Mr. Ernest F. Hagen, of New York, possesses a stoneware jar, fifteen inches high and eleven inches in diameter, with the impressed mark "C. Crolius, Manufacturer, New York." It is well made and of good quality of salt glaze stoneware. He was in turn succeeded by a son of the same name. In the meantime, Reade Street, which before the Revolutionary War was laid out and open to the North River, but east of Broadway to Center Street was not opened, was extended about 1812 when the Collect Pond was filled in, and Potters' Hill was leveled, as it was directly on the path of the new street. Clarkson Crolius, therefore, moved to 65 Bayard street, and stoneware continued to be made there until 1848. He must have done a prosperous business, as soon after the opening of Reade Street we find him installed in a fine house at the corner of

Reade and Cross streets, as seen by the picture in Valentine's *Manual* for 1858. John, William and George Crolius were also potters during the same period, possibly cousins of Clarkson. In addition to being good potters, the Crolius family seem to have been good politicians, too, for the original John Crolius was alderman of the Sixth Ward in 1798; his son somewhat later held a Custom House position, and Clarkson, Jr., was elected alderman of his father's old ward, serving several terms, and eventually moved uptown.

CROUCH WARE. White and thin stoneware, made in Staffordshire and salt glazed; in other words, "salt glaze ware." The earliest kind was of a greenish tint, but it was gradually improved. Mr. Solon says with regard to Crouch ware: "That term, which has puzzled more than one, comes from the name of the white Derbyshire clay; long before being used for salt glaze it had been employed at Nottingham to make crucibles and glass pots, and under the name of 'Crouch clay' it figures in several old documents." (See Salt Glaze Ware.)



CROUCH OR SALT GLAZE.

CROWN, as a mark. Originally the use of a crown as a trademark signified that the manufactory was under royal patronage, and was usually added to some existing trademark. Later it lost this significance and was used so indiscriminately as to be absolutely no indication of either value or royal patronage. Its use is depicted in 170 different forms in the pottery marks lately issued by me, and these might be considerably added to. They embrace the crowns of kings, queens, emperors, dukes, princes and popes.

CROWN DERBY. (See Derby.)

CROWN STAFFORDSHIRE PORCELAIN COMPANY, Minerva Works, Fenton. Proprietors, T. A. & S. Green, china manufacturers. M 72.

CROWN POTTERY COMPANY, Evansville, Ind. White granite, plain and decorated. The works have a capacity of six kilns. M 73.

CROWTHER, JOHN, partner with Weatherby; the first owners, so far as is known, of the Bow factory.

CRYSTALLIZATION UNDER THE GLAZE. This is a glaze which forms itself into crystals which are exceedingly beautiful and of gossamer-like quality. Whilst the crystallization of the various particles may not be depended on to appear in any particular spot, and whilst those of the Japanese were purely accidental, Europeans are now producing these effects scientifically. M. Lauth exhibited a cup in the Sèvres Museum in 1855, since when the Copenhagen factory and other firms have successfully produced them. The Royal Berlin factory makes this glaze suffused with the most beautiful pinkish ruby luster. The effect is charming. Mr. William Burton says: "Seeing the effects that have been produced by obtaining an exquisitely thin film of metal on the surface of a glaze, it is not surprising that potters should also have turned their attention to the production of crystals either on the surface or in the mass of a glaze. Every potter knows by bitter experience how easy it is to spoil certain kinds of glaze by inattention during the firing process, producing either a partial decomposition or devitrification of the glaze coating, which results in the formation of a network of radiating crystals almost like frozen breath on a window-pane. Such an accident might well have formed the starting point of experiments in this direction, but whether that be the case or not, it is certain that a few years ago the Royal Porcelain Works at Copenhagen first made a practicable and commercial success of a method of pottery decoration in which such crystallization had been carefully anticipated, and was to a very limited extent under control. Other famous Continental establishments have followed suit, and now Sèvres, Röstrand, Berlin and Meissen, to mention only firms of world-wide repute, are producing pieces similar to those shown here, though in my opinion the Copenhagen pieces remain unsurpassed. This departure is at once novel and strikingly beautiful. The groups of starlike radiating crystals, together with the soft splashes of broken color from which they half emerge, or under which they half hide themselves, form a decoration at once tender and charming. As with luster, too, the effects cannot be absolutely controlled, and while that imposes restraint and care in handling, it also leaves the door open for something rarer and more precious than was intended. There is no particular secret in the production of these crystalline effects. A melted glass, like any other fluid substance, will dissolve a certain quantity of added silicates or oxides. So long as the glaze is molten the mixture is perfectly clear and apparently uniform, but

as the glaze cools it is no longer able to hold in solution the whole of what it had dissolved. Some oxide or silicate must separate out from the rest, and if that particular substance is one that crystallizes readily, then it will separate in the form of crystals, such as you see here. The higher the temperature to which the glaze is fired and the more slowly it is cooled, the more perfect will be the crystalline growth, and you will find that all the crystalline glazes of this type have been produced on hard-paste porcelain and on stonewares."

CULLYN, ABRAHAM, and THOMAS ROOS were granted an English patent in 1626 for making stone pots and jugs of Cologne ware.

CULS-NOIRS. During the seventeenth century the French Treasury was in such a depleted condition that the Minister Silhouette, to relieve the embarrassment of the situation, called on all those who possessed silver plate to bring it to the mint, where it could be converted into coin for the needs of the state. His request was complied with by the king, Louis XV., whose example was at once followed by many hundred others. The consequent absence of silver plate necessitated the use of faïence, and that of the commonest sort was chosen, the outside of which was glazed in dark brown or black, and was named by the wags *culs-noirs* (black tails).

CURIOUS NAMES OF COLORS. The following curious names of Chinese colors are recorded: Color of mule's liver; color of horse's lungs; yellow of the eel; green of serpent's skin; enamel moon white; blue of the sky after rain.

CUSTODE. (See Nevers.)

CUSTINE (GENERAL COUNT DE). About 1774 the manufactory of Niederwiller passed into the hands of General Count de Custine, who appointed as director François Lanfrey, a skilful faïence maker, whose able management gained for the manufactory considerable importance. Pieces are frequently found bearing the mark of Count de Custine—two C's interlaced. The name of Count de Custine is associated with those of the heroes of the War of Independence, when he fought with Lafayette. He presented Washington with a handsome service made at his factory, decorated with Washington's coat-of-arms and initials. He also produced at Niederwiller a beautifully modeled group of Benjamin Franklin and Louis XVI. During the French Revolution of 1789 Custine was suspected of disloyalty to the Revolutionists because of his aristocratic birth, was tried and found guilty and duly guillotined the same day. (See Niederwiller.)

CUTTS. The last owner of the Pinxton China Works, closed in 1812.

CUZIO. Two priests of this name lived at Pavia, Italy, and in the last half of the seventeenth century decorated pottery with garlands of flowers, etc., covered with a glaze which in places ran in vitreous drops, and which were inscribed on the back with Latin inscriptions.

CYFFLE. (See Luneville.)

CYPLES & BARKER succeeded Cyples at the Market Street Works, Longton. They were contemporary with Wedgwood at the Etruria Works and made fine Egyptian black and other tinted bodies. They were succeeded by Thomas Barlow, who now manufactures china.

CYPRUS. (See Phœnician.)

D

DACHNEL, ALFRED. China manufacturer, Hirschberg, Germany. Established 1854.

DAGOTY, P. L. Honore established in Paris a hard porcelain works in 1785. In 1812 Edward and Theodore Honore were in partnership with P. L. Dagoty, and the works were called "Manufacture de Madame la Duchesse d'Angoulême." Dagoty retired in 1820 and established another works. Dagoty had at the end of last century a factory of hard porcelain which was later styled and the products marked "Manufactur de S. M. l'Imperatrice." He was one of the first to adopt lithographic stones in the decoration of china. M 74.

DAHL. (See Hochst.)

DALLE. A painter at the manufactory of Boch Brothers, Septfontaines. He painted views and figure subjects on plaques, generally from engravings, and they are distinguished by the care and fidelity with which they are executed. He usually signed on the reverse of the piece, often with a date, "Dalle, 1784."

DAMASCUS. The name is assigned to a large class of wares, probably made in Egypt, Turkey, Syria, Asia Minor, etc., a certain general character pertaining to the whole. There is no doubt that Damascus was a large producer of this class of pottery, which was known in the sixteenth century as "Damas" ware. The body is of a grayish white, of sandy consistence, and similar to that of Persian ware. Decorations are of rich coloring, blue and turquoise predominating, the pieces being sometimes covered with scale work with panels of Oriental form, or large sprays of flowers, such as roses, tulips and carnations, the colors used being a rich blue, turquois, green, purple, yellow, red and black. The forms are elegant;

large bowls on raised feet, plaques with sunk centers, pear-shaped jugs, bulb-shaped bottles with elongated necks, etc. On this subject M. Garnier says, however: "In the 'Inventaires' of the fourteenth and fifteenth centuries there is frequent mention made of the potteries of Damas, but the brevity of the notices does not permit me to determine either the method or style of decoration. It is, however, quite certain that these pieces of ware were estimated at a high price, since they are inventoried with personal property and precious articles, and furthermore some of them are mounted in silver or gold. Some very rare specimens of mosque lamps have been attributed to Damas, dating from the sixteenth century, but without certainty. It is certain, however, that Damas was an important center for the manufacture of decorative tiles, but in the absence of precise documents it is very difficult to determine the exact character. It is probable, however, that many of the faïences attributed to Rhodes (Sindos) belong to Damas."

DAMMOUSE, M., Sèvres. The pottery exhibited at the Paris Exposition was his own individual creation, and a most interesting collection it was. It consisted of plaques exquisite in their color scheme, busts and vases of graceful and original conception.

DANGU (near Gisors). In 1753 there was in this locality a manufactory of faïences belonging to the Baron of Dangu, who sold it to Dominque Pelleoee, faïence painter; Adrien Levesque, modeler, and Jacques Vivien, a citizen of Rouen. The three associates did not make a brilliant success of their business, and their wares were finally sold out publicly in 1753 at the door of their factory for the benefit of the Baron of Dangu and other creditors. There do not seem to be authentic specimens extant.

DANIEL, OF COBRIDGE, Staffordshire, "was the first local potter who practiced enameling in his factory, and his example was soon followed by others. This was the highest improvement that could be applied to the ware. It perfected and completed its manufacture. It achieved at once a great success, principally because it became in that way a fairly good substitute for the painted china so much in fashion, but which, on account of its exorbitant price, was only to be indulged in by the wealthiest class. Either the embossments were followed by the painter and relieved with colors, or else patterns were traced across them in a free and offhand manner. Chinese decorations were often imitated; sometimes engravings were copied, or the artist chose to exert his imagination upon figure subjects or pastoral compositions in costumes of the period. We possess a tea canister painted with garden scenes, each comprising several

personages and an elaborate landscape. In front is a delicately worked ornament, probably the reproduction of a book-plate, surrounding the words 'Fine Bohea Tea.' The whole is beautifully executed. By the additional process of size gilding these pieces are made to look very handsome. The enamels on all the pieces shine with the brightest hues—the turquoise blue especially would bear comparison with the best soft china color—and they stand out all the better by the contrast with the dull gray tint of the body."—*The Art of the Old English Potter.*

DARNET, Mme., the wife of a poor surgeon, found, in 1765, near St. Yrieix, a soft earth of great whiteness. Thinking she could use it instead of soap, on account of its oily touch, she took a quantity of it home. Her husband submitted it to a chemist for analysis and it was soon afterward decided to be kaolin. The discovery was of great importance. Sèvres had long been anxious to make hard porcelain and had been in negotiation with Meissen workmen (Busch and Stadelmeyer), which fell through owing to the difficulty of obtaining material. Mme. Darnet's discovery removed this difficulty, and hard porcelain was made at Sèvres shortly afterward. At Limoges an immense industry resulted, which has had its highest development through American enterprise within the last fifty years. France did not prove herself very grateful to Mme. Darnet, for up to 1825 she was spending her old age in poverty, when through the intervention of M. Alluaud and others Louis XVIII. granted her a pension. In the Sèvres Museum a piece of the kaolin found by Mme. Darnet is still preserved, together with a small enamel statuette of the infant Bacchus, made from a portion of the kaolin, both of which were sent to Macquer (director of Sèvres) by the Archbishop of Bordeaux.

DAVENPORT, JOHN. To Mr. Davenport may fairly be assigned the honorable position of having improved the body of English china —an improvement which could not be furthered during the eighty years it was made from the same formula. There are not wanting expert amateurs who, as far as the body is concerned, place it in the first rank. Mr. Davenport's connection with pottery commenced at Stoke-upon-Trent, when he was in partnership with Mr. Woolf, who had a manufactory adjoining Minton's. The partnership was dis-

solved in 1794 and he acquired the works at Longport formerly occupied by John Brindley, brother of the famous engineer, James Brindley. In the meantime he had made a trip to France, and whilst there had studied the manufacture of china, had recognized the superiority of the French methods, and adapting them to English requirements was soon able to produce a china much superior to anything then made in England. Oriental designs were freely copied, the blue and red "Japans" being highly prized. An impetus was given to the production by the patronage of George IV., an important commission being executed for him in 1805, after which the royal crown was added to the trademark. It is the fashion in democratic quarters to speak lightly of this royal patronage, but human nature is much the same the world over, whether under a monarchy or a republic; and the effect on the public mind if our honored President intrusted the execution of a service to an American manufacturer would be such that the distrust of home productions which, in spite of all that can be said, exists in the minds of many, would be removed,the unparalleled advance made in American ceramics would be fully recognized, and an impetus would be given to the higher cultivation of an honored art which has for all time commanded the patronage of kings and princes, has been the historian of the student and inspired the loftiest of poets. Davenport in the meantime (1801) had added glassmaking to his business, and in 1805 he made a further step by including the staining and painting of glass windows for churches, etc., with Fuseli, who was afterwards president of the Royal Academy, at the head of a large number of painters. Mr. Davenport represented the borough of Stoke-upon-Trent in Parliament for a number of years. He died in 1834, leaving a prosperous business to his two sons,

DAVENPORT, HENRY and WILLIAM. The former was killed in the hunting-field, and the latter died in 1869. He was succeeded by his son,

DAVENPORT, HENRY, but he had inherited neither his grandfather's business acumen nor skill as a potter, and the works gradually decayed and were finally disposed of at auction—an ignominious ending to such a brilliant commencement. The trademark was an anchor, with the word "Davenport" or "Longport" above (see Anchor), until 1805, when the royal crown above "Davenport, Longport, Staffordshire," was used. A small rosette was also occasionally used. M 75.

DAVIS, ISAAC. An Englishman who went to Trenton in 1862, working first for William Young & Sons. He afterward formed a

partnership with George Lawton, joined the Glasgow Pottery Company, and in 1871 purchased a partnership in the firm of (originally) Taylor & Speeler, and in 1875 became the sole proprietor.

DAVIS, WILLIAM. One of the original shareholders in the Worcester Works.

DE BETTIGNIES. A manufacture of soft-paste china was commenced here in 1815. Copies of the finest Sèvres pieces are beautifully reproduced.

DECK, THEODORE, Paris. In 1859, in partnership with his brother, Theodore Deck founded a manufactory of artistic pottery in the Impasse des Favorites in Paris, and has remained the first ceramic artist of the day. It has been truly said of him that he has confronted and overcome all difficulties, and that his various applications of colors and enamels to pieces of perfect workmanship and purity of form are beyond all praise. He first turned his attention to imitations of the Persian faïence of golden or pearly hue, or decorated with that splendid carnation red, the secret of which seemed to be known only to the potters of the East, and achieved a remarkable success. The enamels of China and Japan tempted his skill and ingenuity, and were straightway duplicated; the intricacies of the famous faïence d'Orion, those wonderful monuments of skill and perseverance, succumbed to his genius. Italian majolica was successfully reproduced, as was also Hispano-Moresque ware with all its intricacies of design. Triumphs such as these would even singly have brought fame to any one, but in addition to unraveling the ceramic secrets of the past Mr. Deck gathered around him a notable band of artists like Hamon, Raunvier, Collin, Reiber, Legrain, Mme. Escallier and others, and elaborated a style peculiarly his own, and equals anything ever produced in ceramics. France may well be proud of an artist in which so many qualities are united.

MEDICI PORCELAIN. DESIGN AT BOTTOM OF BOWL.

DECKER, JAN. A ceramist but little known, who lived in Delft in 1698. Two busts decorated in camaieu blue of personages in antique draperies crowned with a royal coronet bear his name in full, "Jan Decker, 1698."

DECORATION, the first, on European china. This was on a piece of Medicean china and is signed G. P., but the artist's name is unknown. The design, of which we give an illustration, has been variously described as St. Mark, and also as St. Jerome.

DELANEE was one of the first owners of the Sceaux factory. (See Sceaux.)

DELARESSE, JEAN. A potter of Marseilles early in the eighteenth century.

DELFT, Lambeth. Dutch workmen from Delft established sev-

LAMBETH DELFT DISH, 1660.

eral potteries in Lambeth early in the seventeenth century. In 1676 a patent was taken out by A. Von Hamme—brought to Lambeth, it is said, at the suggestion of William III., through his ambassador

at The Hague—for the manufacture of pottery "after the way practiced in Holland, which has not been practiced in this our Kingdom." This claim is not to be substantiated, as pieces of English delft are in existence dated 1631 and 1634. The Lambeth body was harder than the Dutch and did not absorb much glaze, so that the color of the red body showed through. The glaze, not being in affinity with the body, frequently crazed—a defect the Holland delft was not liable to. The back of the latter is always enameled, whilst the English is only covered with the usual lead glaze, sometimes mottled with tortoiseshell. Bottles of delft ware to keep foreign wines in were much in vogue and were lettered in blue to show the year of bottling, as "Sack 1649," "Claret 1648," etc. Cups with twisted handles, drug pots inscribed with the names of their contents, posset pots and large dishes, puzzle jugs, were among the articles manufactured. A large dish with shields and emblems bore the inscription: "EARTH : I : AM : ET : IS : MOST : TRWE : DESDAN : ME : NOT : FOR : SOO : AR : YOV. JAN. 16TH, 1660," and also on a scroll the names "GEORG : AND : ELLIZABETH : STERE." Many were painted with Biblical subjects such as Adam and Eve, Jacob's Dream, etc.

DELFT. This word is derived from the city of Delft, in Holland, where large quantities of decorated earthenware were produced in the sixteenth, seventeenth and eighteenth centuries. The word was used in England at first to indicate the painted ware produced there in imitation of delft, and later in a generic sense for all kinds of earthenware, but of late years has fallen into disuse.

DELFT, Bristol. (See Bristol.)

DELFT, Holland. About the end of the sixteenth century the Dutch, through trading with Japan, imported many pieces of Oriental china, and it was their desire to reproduce or imitate these that led to the foundation of an industry destined to grow to immense proportions. Their ware was made from clay of Bruyelle, near Tournay, which was skilfully mixed with sand and very carefully potted. The sand made it hard and capable of being made into pieces for table use. To hide the coarseness of the surface and to come more approximately near the Oriental china it imitated, it was covered all over with a perfectly smooth and even bluish opaque enamel, so that at a short distance it was possible to mistake the one for the other. On this surface artists of note copied first Japanese designs in blue, and afterward more original creations both in blue and polychrome. The industry grew steadily, and did not begin to decline until the close of the eighteenth century. In addition to plaques, vases, statuettes, pitchers, etc., the quaint forms of the Japanese were

copied, and led to exaggerated forms for table services in the shape of cover dishes in the form of birds, spice boxes resembling a Chinese mandarin, etc. The manufacturers were numerous and each fabrique was distinguished by a sign, such as "The Three Bells," "The Porcelain Hatchet," etc., which were all registered in the city archives, so that it is possible to trace with much certainty the progress of the manufacture. Many of the potters are included in this work, either

Front. *Back.*

DELFT VIOLIN.

under their name or that of their manufactory. The industry considerably increased the reputation of Delft, and its commerce grew accordingly. The products varied considerably in value, as was natural in so large an undertaking, but generally speaking it was far ahead of any of its imitators. We illustrate a violin of faience said to be one of four made by a Delft potter on the occasion of the wedding on the same day of his four sons. The story may be fanci-

ful, but four such violins are known in European collections. Mr. J. W. L. Glaisher in a paper read before the London Society of Arts gave the following account of the process by which Delft ware was made: "The clay was thrown or molded in the ordinary way, and submitted to a first firing. The article was then dipped in a white liquid, the dense matter in which formed a coating to the body of the earthenware. The painting was effected on this white porous substance. The article was then covered with a transparent glaze and fired again. In the second firing the white coating and the glaze were both fused, the former becoming a white enamel, generally of a milky hue, and the latter a thin layer of glass. Both firings took place in the same kiln, but a higher temperature was required on the second firing to fuse the enamel. The articles in their raw state were placed for their first firing at the top of the kiln, where the heat was less. The clay in its biscuit state was very absorbent, and when dipped into the liquid rapidly drank in, so to speak, the water, leaving behind upon the surface a white coating of solid matter. In order to paint upon this spongy substance, which may be compared to blotting-paper, very great dexterity as well as suppleness of hand was required, which could only be gained by early training and long practice. The difficulty was increased by the nature of the paints, which were formed of a mixture of the coloring matter, itself very fluid, with pure water, without the addition of gum or any other substance to give cohesion. On account of the excessive thirstiness of the ground and the very liquid character of the pigments, the artist had to manipulate his brush with great skill and quickness, for the least delay or hesitation on any spot caused too much of the color to be absorbed there and spoiled the piece. It is clear that painting executed upon so uncongenial a substance could not be very accurate or exact in details, but the boldness and vigor imposed by the conditions gave to the finished work a special character and charm which were quite its own. Patience and care were not the qualities required in the artist, but there was ample scope for the display of originality and dexterity, and in spite of the difficulty of working upon a spongy and absorbent surface, effects could be produced of the most surprising delicacy." Later, the Dutch potters learned to fire the enamel first, thus giving the artist a firm ground to work upon. The following is a partial list of Delft potters and their marks, in addition to those under separate headings:

Johannes den Appel. I D A
A. C. Brouwer. A B
Gerritt Brouwer. L P K
Hugo Brouwer. H B

Joost or Justus Brouwer.
Porcelain Hatchet
Huibrecht Brouwer.
Porcelain Hatchet
Cornelis de Berg. C B
Mathjis Boender. M B
Paulus van der Burch. P V B
Jan van der Buergen. I V D B
Matheus van der Bogaert. M B
Peter van der Briel. P V B D
William van Beek. W V B
Justus de Berg. I B
Cornelisz. C
Lamburtus Cleffins. C L
Lucas van Dale. L V D
Jean Thennis Dextra. I T D
Zacharie Dextra. D Z
Pieter van Doorn. P V D
Flyt. F 1680
Martinus Gouda. (See marks)
L. Kruyk Ghisbrecht. G K
Johannes Gaal. I G
Lambrecht Ghisbrecht. L G
Jan Groenland. I G
J. A. van Harrimen. H
Damis Hofdiek. H
Johannes Harlees. H L
Hendrick van Hoarne. H V H
Jacobus Holder. J H
Jan Sicktis van der Houk.
J V D H
Dirck Harlees. D H
Jacob Wemmer Hopestein. I W
Keyser & Pynaker. A P K
Q. Kleynoven. Q A K
Jan Jansz Kulick. H & K
A. Kruisweg. A K
Cornelis A. de Keiser. C K
Cornelis van der Klott. C V K
Gerritsz Pieter Kam. G K
Hendrick de Koning. H D K
Gillis de Koning. G D K
Willem Kleftijus. W K
Johannes Knoetter. K
A. C. D. Keiser. A K
Alburtus Kiel. A K and star
Jacobus Kool. I K
Lucas P. van Kessel. L K
Pieter Gerritsz Kam. P K
Jeronimus Pietersz van Kessell.
I V K
Jan van der Meer. A J
Jacobus de Milde. I D M
Johannes Mesch. E M S
Hendrick van Middeldyk.
M D K and H V M D
Pietrus van Marum. P V M
Pieter Paree. M P
D. Pauw. D P A W
Anthony Pennis. A P
Johannes Pennis. J P
Jeronimus Pieter. P
Jacobus Pynacker. P K
Augustijn Reygens. A R
L. van Schoonhoven. B V S
Thomas Spaandonck. D S K
Cornelis van Schagen. C V S
Paulus van der Stroom. P V D S
Johannes Verhagen.
C B S and I V H
G. Verstelle. G V S
Johannes van der Wal. J V D W
Cornelis Witzenberg. C W
Jean de Weert. I D W

DELFT, Liverpool. From Lambeth the making of delft gradually drifted to Liverpool, and it was an important trade there early in the eighteenth century, though there is evidence of a much earlier production, a delft mug in the Liverpool Museum and attributed to

Liverpool manufacture being dated 1645. As early as 1716 it had been brought to perfection there, the blue painting being cleverly executed and comparing favorably with the Holland delft. Punch bowls were made in large quantities, Shaw and Pennington being celebrated for them between the years 1750 and 1780.

LIVERPOOL DELFT TILE.

DELFT, Staffordshire. Said to have been introduced there by Thomas Heath in 1710. Very large plaques were produced, roughly painted with portraits(?) of King William and Queen Mary in endless variety, Queen Anne, George I. and the Duke of Marlborough. The figures are rudely drawn, the clouds and trees daubed on with a small sponge, the rims marked all round with heavy strokes of the brush. In Staffordshire it was not found possible to naturalize the manufacture, partly because of the poorness of the glaze and colors, and the cost of the tin. It was not adapted to

STAFFORDSHIRE DELFT DISH.—WILLIAM III.

domestic purposes, and the local earthenware was so much superior that gradually the attempts to imitate foreign delft were abandoned.

DELFT, modern. At the Chicago Exhibition Messrs. Thooft & Labouchere, of Delft, had a fine exhibit of reproductions of old delft, which had been faithfully and artistically reproduced, they having wisely adhered strictly to the methods of old Dutch potters. It was an instantaneous success, quickly became the fashion, and immediately the market was flooded with blue and white pottery of all grades—of badness. Anything that was blue and white was called delft, provided only that it had a windmill or a canal view on it. Exception to this may be taken in the case of Boch Frères, La Louverie; the Royal Bonn Factory, and Villeroy & Boch. Our illustration is from a plaque made by Thooft & Labouchere.

MODERN DELFT PLAQUE.

DELLA ROBBIA. (See Robbia.)

DELLA ROBBIA POTTERY COMPANY, Birkenhead. This pottery was started under the auspices of Mr. Harold Rathbone some sixteen or seventeen years ago. Works of great individuality and character, beautiful and rich in coloring, were produced, but for some reason unknown to us the venture was not a success, and the works were closed last year. This is much to be regretted, as it was a very earnest effort to produce artistic pottery in the fullest acceptance of the term.

DELINIERES, R., & Co., Limoges. Established about 1847 as a manufactory of white ware, which was sold to the Paris decorators. In 1881 they added a decorating department. Mr. Delinieres, the founder, has been decorated with the Cross of the Legion of Honor and is also one of the directors of the Sèvres works. M 76.

DEL VECCHIO, Naples. A potter of the eighteenth century.

DENABY, Yorkshire. A pottery was established here about 1864 by Wilkinson & Wondle, the latter from Messrs. Alcock's, of Burslem. They only produced the ordinary class of earthenware, and would not call for comment only from the fact that they used the Staffordshire knot as a trademark, probably to induce people to believe that the wares were of Staffordshire make. The works were closed in 1869.

DENMARK. The interest in Danish ceramics centers in the Royal Porcelain Works at Copenhagen. It is not, however, the traditions

ROYAL COPENHAGEN WARE.

of the past—though those are honorable enough—but the progress effected during the last few years that will in the future make the refined amateur linger with keen appreciation on its productions of to-day or handle them with a feeling akin to veneration. So much has been said, and has been said so well, by such authorities as C. W. Binns and M. Garnier—the ceramic authorities of two great ceramic nations, England and France—that added words of praise sound superfluous; yet our meed of praise must go to swell the general chorus. But first for the history of the house. Founded in 1772 by a chemist named Mueller and a workman from the Furstenburg factory, it was in a fair way to be abandoned when King Christian VII. purchased it from them. No notable success followed —if we except a set painted with Danish flowers now in the castle at Rosenberg, and which in late years has been reproduced—until the spirited reproductions of the great Danish sculptor, Thorwalsden, were issued. This lifted the factory to a higher plane, but the expenses of the productions were too heavy to make them a commercial success, and in 1867 the works were sold to Mr. Flack, who in 1882 resold it to the limited company "Aluminia," the owners of an extensive earthenware manufactory. The manufactory was authorized to retain the original mark—three wavy lines representing the three Danish waters, the Sound and the two Belts. The administration was intrusted to Mr. Philip Schon, Councillor of State, who associated himself with two gentlemen of eminent capacity—Mr. Arnold Krog, an artist of undoubted talent and astonishing originality, and Mr. V. Engelhardt, chemist. With the new management a new era commenced, the evidence of which was first seen at the Copenhagen Exhibition of 1888, and at the close of which Mr. Schon was made a knight-commander of the Legion of Honor. Something new had been created—a something new in ceramics as charming as it was original. The clear soft enamel of the glaze had been made subservient to and at the same time an important accessory to the pigments of the artist—if such an apparent contradiction can be allowed. With one or two simple colors the artist had attained effects before but dimly realized. The difficult and elusive "grand feu" colors had become subservient to him, and an indescribable softness, an amalgamation of color and glaze never excelled in Sèvres *pate tendre*, had been realized. The dreamy softness of some of these pieces is indescribable, and the charm is enhanced by the velvety softness and purity of the glaze. Black and white fail to give more than an idea of this new school of ceramics, but something of the originality of treatment may be gleaned from the accompanying

illustration. The Copenhagen factory was the first to produce the beautiful crystalline glaze effects spoken of under that heading, and some most charming results have been obtained. The directorship of the manufactory is now vested in M. Dalgar. M 77. Of the pottery of Kiel we have spoken elsewhere, and also of the magnificent terra-cotta Greek vases, etc., of Mme. Ipsen and Wendrich & Sons, both of Copenhagen.

DENSHICHI, KANZAN. A potter of Kiyomidzu, Japan, celebrated for his imitation of iron inlaid with gold on porcelain.

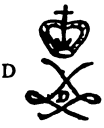
DERAUBERT, GERAULT. (See Orleans.)

DERBY. As in the case of all important English china manufactories (with the exception of Worcester), their origin is by no means clear. The partnership of John Heath and William Duesbury, 1756, cannot have been the commencement of the works, for in December of that year there was an auction sale in London lasting four days by order of the "Proprietors of the Derby Porcelain Manufactory," of "a curious collection of fine figures, jars, sauce boats, services for desserts, after the finest Dresden models," which could not possibly have been placed on the market in less than a year's time. After the advent of Duesbury the business considerably increased, and about 1758 the works were considerably enlarged and the number of hands employed nearly doubled. For the next ten or eleven years but little is known, and this little is derived from a few notices of auction sales of figures, jars, candlesticks and baskets. In 1770 Duesbury purchased the Chelsea factory, and in 1779 he also became the owner of the Bow works. The Chelsea works was carried on there until 1784, when the molds and workmen were removed to Derby. This is the period, 1769-1784, referred to as the Chelsea-Derby period, and to this belongs the mark D (A) painted in gold. A crown having the bows carefully jeweled was added to the D mark in 1773 (B), the crossed batons and dots being added about 1782 (C), and this mark was continued until 1831. Being

A Chelsea Derby, 1769-1784.

B Crown Derby, 1773-1782.

C Crown Derby, 1782-1831.


D Late Crown Derby.

painted marks, these all varied considerably. The body was first a porcelain frit containing Dorset clay, bones being afterward added, and lastly china clay and china stone. The artists employed anterior and up to 1782 were F. Duvivier, P. Stephan, R. Askew and W. Billingsley, who was apprenticed there in 1774 and continued to work there until 1794. White biscuit and colored statuettes carefully modeled, and in the case of the latter not extravagantly overloaded with gold (a common fault), were made. The decorations were characterized by simplicity—deep blue borders and gold leafage; simple festoons in pink; Chantilly sprig and other simple conventional designs of leaves and flowers. William Duesbury died in 1786 and was succeeded by his son William, who was joined in

DERBY JARDINIÈRES AND VASE.

1795 by Michael Keen, a clever miniature painter. Duesbury died the following year and Keen married his widow, but shortly afterward withdrew, and the business was continued by the third William Duesbury. During this time the paintings of flowers by Billingsley had attracted much attention and gained for him quite a considerable reputation. Every care had been taken in the production of goods, and the traditions of the house had been carefully preserved. In 1815 the premises were leased to Robert Bloor, and he, having to pay the purchase money by instalments, raised it by the sale of the accumulation of defective pieces which he had had decorated. The monetary success of these sales was so great that the temptation to produce large quantities of goods for auction was too great to be

resisted, less care was taken in the manufacture, and the decline of the works commenced. Bloor was succeeded in 1846 by Thomas Clark, who discontinued the works, selling the molds and engravings to Staffordshire manufacturers. Some of the old employes joined together and into one common stock united what money, skill or tools they possessed. The title of the new firm was Locker & Co., and in 1859 on Locker's death changed to Stevenson & Co., and eventually to Hancock & Co. It is now carried on by Sampson Hancock alone. Within recent years an effort has been made to revive the lost glories of Derby. Mr. Edward Phillips in 1877 gave up his appointment as one of the managing directors of the Worcester Porcelain Company, and, joined by Mr. William Litherland, a well-known china dealer of Liverpool, and Mr. John McInnes, formed a limited liability company with a capital of £68,000 for that purpose. The first works were on the Osmaston Road, but the old poorhouse a little later was purchased for $10,000 and converted into a manufactory. It was not until 1880 that it was in working order and a revival of the old Derby shapes and decorations attempted. Mr. Phillips died in 1881, and Mr. Litherland in 1882, the active control of the works being then vested in Henry Litherland and Edward McInnes. In 1891 the Duke of Devonshire assisted them in procuring the privilege of adding "Royal" to the style of the firm, which is now "Royal Crown Derby Porcelain Company, Limited." That the present factory is in no way behind the old one is evidenced by the production of a chalice in eggshell china in which are introduced eight grotesque figures. No less than eighty different molds were required to make this piece, and although it stands 10½ inches high the weight is only about five ounces—truly a triumph of delicate manipulation and craftsmanship. M 77.

DERBYSHIRE. In addition to the china works at Derby there are numerous stoneware factories at Chesterfield and Woodville, and at a few other places. The Woodville productions are locally known as "Derby ware." The matter is more fully treated under the head of Woodville.

DERUELLE. (See Clignancourt.)

DERUTA. (See Diruta.)

DE ST. CRIG. (See Creil & Montereau.)

DESHIMA, Japan. The Portuguese were the first Western traders who reached Japan, landing there in 1542, and they speedily erected a factory at Nagasaki. In 1635 the island of Deshima was raised by the Japanese in the harbor of Nagasaki, for the sake of shutting them off from the town people and keeping them under

watch and ward. In 1637 an imperial proclamation ordered their expulsion, but they seemed to have maintained a footing on the island for two years longer, when, fearing their lives would be in danger, they left the island. In 1641 the Dutch factory at Hirado was transferred to Deshima, and the Dutch took up their residence in the island prison. Notwithstanding the indignities they suffered at the hands of the Japanese officials, a large business was done.

DESMURAILLE, JEAN-BAPTISTE. An artist of St. Amand. He was an excellent flower painter—tulips, roses and pinks, mostly in bouquets, predominating in his work. Violet, golden red and a rich green are his best colors.

D'ESTE, ISABELLA. A curious document in the archives of Mantua, dated 1494, tells us that Isabella d'Este, wife of the Marquis of Mantua (Gonzaga), had sent a plate which had been broken into three pieces to be repaired at Ferrara by the maestri working at the castle. This was done, and the mended plate returned at the desire of the Duchess of Ferrara, with another as a present.

DESVRES (Pas-de-Calais) possessed two manufactories of faïence —the one founded in 1732 by Dupre-Poulaine, to whom the mark D. P., with an accolade beneath, is attributed; the other in 1764 by Jean François Sta. Only common faïence with greenish glaze was manufactured here, the decorations being coarse, and sometimes done in cameo blue, sometimes in colors where violet of manganese predominated. To Desvres are attributed a large number of jugs called jacquelines, representing a seated female figure of indifferent workmanship, and whose dress was decorated with coarsely painted flowers. These jugs of a rather odd shape may be compared to the jolly "Toby fillpots" of Staffordshire ware.

DEVERS, JOSEPH. An Italian potter who in 1847 endeavored to revive the old processes of the potters of Urbino and Faenza, and who obtained medals at the Paris Exhibition of 1849, and in 1851 at London; started in Paris a small manufactory of decorated faïence imitated from the bas-reliefs of Della Robbia, etc.

DEVONSHIRE. A fine terra-cotta clay is extensively used in Devonshire in the manufacture of ornamental goods, there being works at Torquay, Bovey Tracey, Barnstaple and Aller Vale, near Newton. The productions of the latter are chiefly slip painted.

DEXTRA, ZACHARIE. A master potter of Delft, established in 1720 at the sign of "The Three Tuns." He imitated the Meissen porcelain both in decoration and gilding, producing really wonderful effects. It lacked merely translucency to make the imitation perfect.

DEXTRA, JEAN THEUNIS, surnamed Dextra the Younger, to dis-

tinguish him from the above, was a master potter of Delft, established in 1759 at the sign of "The Greek." M. Harvard cites a piece by him as one of the most perfect pieces of Delft pottery known. His mark was his initials, often accompanied by a number—"I. T. D., 12"—and sometimes with the monogram A. T. over them.

DIANA DE POICTIERS, FAIENCE DE. A name sometimes erroneously applied to faïence d'Oiron.

DIETERLE. Director of the Sèvres manufactory, 1852. Previous to his able management the shapes and ornamentations had become extravagant in style, though still of faultless execution; but his taste modified the style and added much to its beauty. The paintings no longer covered the entire surface of the object decorated, but allowed the purity and clearness of the enamel to show, thus enhancing the beauty of the whole.

DIETRICH. A celebrated engraver and the director of the Meissen factory after the peace following the Seven Years' War.

DIEUL. A faïence painter who worked at Rouen in the eighteenth century in the manufactory of the brothers Vallet, and of whom nothing is known absolutely. Some fine pieces of work dating 1756 are marked with the name Dieul, and others marked with D. and F. are attributed to him.

DIGNE, a Parisian ceramist who lived in the Rue de la Rouquette and manufactured pharmacy pots and bottles for the Abbess of Chilles (daughter of the Duc d'Orléans, who was regent of France during the minority of Louis XV.), who had established a pharmacy at her abbey. The decorations of these pots and jars are in imitation of Rouen ware in blue and citrine yellow, and are emblazoned with a lozenge-shaped shield bearing the arms of the Orleans family. They are representative of the Parisian faïence of the eighteenth century.

DIGOIN, near Paray le Monial, France. Messrs. Utzschneider, of Sarreguemines, have a large factory here, employing about two thousand hands. (See Sarreguemines.) There was a faïence factory here as early as 1788.

DIHL. An able chemist who with Guerhard founded in 1780 a porcelain manufactory in the Rue de Bondy, Paris. The ware was of fine quality, skilfully decorated, and the manufactory was for a long time very prosperous owing to the ability and intelligence of its two founders. Through Dihl's chemical discoveries ceramists acquired a more varied and reliable palette. The porcelain of this manufactory has been and still is erroneously called "Porcelaine d'Angoulême"; the correct term is "Porcelaine du Duc d'Angoulême."

Before the Revolution the products were marked with a red oval stamp bearing the cipher of the Duc d'Angoûleme, surmounted by the prince's crown. After the overthrow of the monarchy the name of the firm in full was substituted, and after the Restoration it was in turn replaced by the following mark, "Manufac de Mgr le Duc d'Angoulême à Paris," which mark is seen on a cup in the South Kensington Museum. There may also be seen one of the finest and most important pieces of this manufactory, the beautiful vase representing "The Abduction of the Sabine Woman."

DIJON (Cote-d'Or). There were several manufactories here, the earliest dating from about the middle of the seventeenth century. With the exception of a few pieces there was nothing remarkable in the products, which were of ordinary kind. According to M. Louis Marchant, the historian of the Dijon potteries, a man named Dupont, who died in 1711, established the first pottery at Dijon in 1669. The Nevers influence is manifest in a number of pieces cited by M. Marchant, among others a traveling-bottle of orbicular form, decorated on the one side with a representation of St. Benigne, the patron saint of Burgundy, and on the other with an escutcheon of floral design carrying the name of its proprietor, Benigne Vetre, and the date 1693, said to be the most ancient patronymic faïence with a date. Mustard pots were made at Dijon, some of extravagant size, with escutcheons richly covered with fleur-de-lis, surmounted with a royal crown and bearing the inscription "Moutarde Fine di Dijon." The Dijon faiences are usually without any mark, though some few pieces have the full name signed.

DILLON, FRANCIS, & Co., Cobridge, Staffordsville. Manufacturers of printed earthenware, 1843.

DILLWYN, L. W. (See Swansea.)

DINOS. An open-mouthed Greek wine vessel.

DIPT (or Dip) WARE. This kind of ware was made long before the present earthenware was invented. The colored bands and patterns are made with the help of a spouted vessel charged with slip, into which the workman blows through a tube and forces the creamy clay out of the spout on to the piece revolving slowly on a lathe. In this manner rings or bands can be deposited on the revolving piece of clay, uniting with it, or, by dexterously dropping portions of slip, patterns of different kinds can be produced. If on a band of slip color termed "Moco" mixed with tobacco juice is dropped, the latter causes the color to disseminate its particles in an arborescent form. There are three Moco colors, blue, green and black, the latter distinguished as "Black Jack's Moco."

DIRUTA (or Deruta), Italy, a dependent borough of Perugia, is said to have possessed in 1461 a manufactory of faïence founded by Agostino di Antonio di Duccio (said to be a pupil of Luca della Robbia), who executed the enameled bas-reliefs on the façade of the Church of St. Bernardino and in St. Domenico. While there is some doubt as to the certainty of this, there is none of the fact that in 1501 there was a manufactory here, though most writers give the date 1525. There is a good deal of uncertainty about the wares of Diruta in the Papal States, many writers ascribing to it the large pieces lustered with a golden pigment of peculiarly pearly effects in certain lights, which had been unidentified until the discovery a few year ago of certain plates with a similar luster marked "In Deruta." Mr. C. Drury E. Fortnum thinks this is an error, and that the Diruta productions were of an inferior quality. Castel di Diruta, or Deruta, is but a few miles from Perugia, within easy reach of Gubbio, and as the same processes were employed at all three places, producing a similarity of results, the difficulty of positively assigning pieces to Diruta is apparent. Other authorities do not hesitate to ascribe to Diruta pieces signed "Il Frate," made between the year 1541 and 1545 by a monk or order of monks. They are indifferently drawn, traced in brown or blue, had a dull enamel and a brassy luster.

DISDIER. Manufacturer of casing tiles or "Azulejos" at Valentia. Mentioned by Gournay in 1788. His widow was still established in 1808, as is evidenced by a picture composed of faïence tiles in the hall of the chapter house in the cathedral of Saragossa, and signed: "Reals Fabricas de Da Maria Salvadora Disdier. Brit ft. ano 1808."

DISKOS. A Greek piece for table use similar to a low-footed comport such as is known to the trade as a "comport, 9 by 2½."

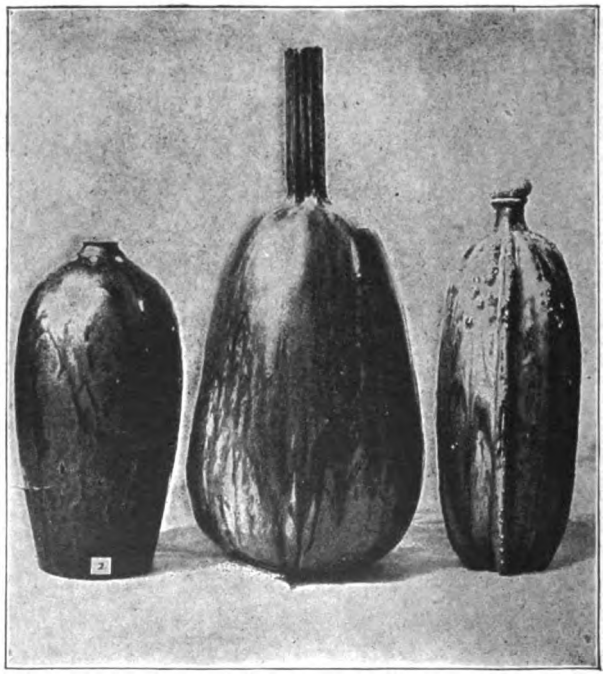
DISKS ON WALLS. After the revival of pottery at Pesaro in 1300 (according to Passeri) it became the fashion in that city to adorn the church towers and façades with disks and "bacani" of colored and glazed earthenware—a practice which had been in use in Pisa and other cities as early as the eleventh century. It was probably this custom that suggested in the Staffordshire potteries the inlaying of 12 by 12 inch memorial tiles in the walls of the churches there. These are made in the richest encaustic colors, are placed in diagonals, and are extremely effective as a decoration, besides being imperishable tributes to former members of the various churches.

DIXON, AUSTIN & Co., Sunderland, England. Manufacturers of earthenware, 1800.

DOAT, TAXILE, Sèvres. This artist entered the National Manu-

PAPER-WEIGHTS AND PÂTE-SUR-PÂTE PLAQUE.

factory of Sèvres in 1877 and makes a specialty of pâte-sur-pâte. This style of decoration was introduced at Sèvres about 1848, and is as good an example as anything of the possibilities of perfecting and ennobling a pottery process, which in this case had its inception in



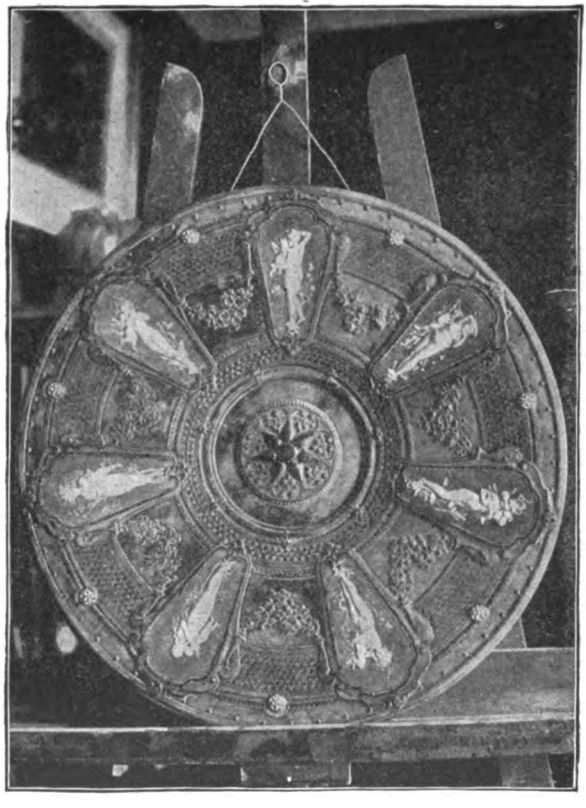
FRUIT FORMS.

the tygs of Wrotham and the rude slip-painted dishes of Toft. The process by which such artists as M. Doat obtain the soft and harmonious cameo-like effects is described elsewhere. But all the artistic skill lavished on such productions would be wasted unless

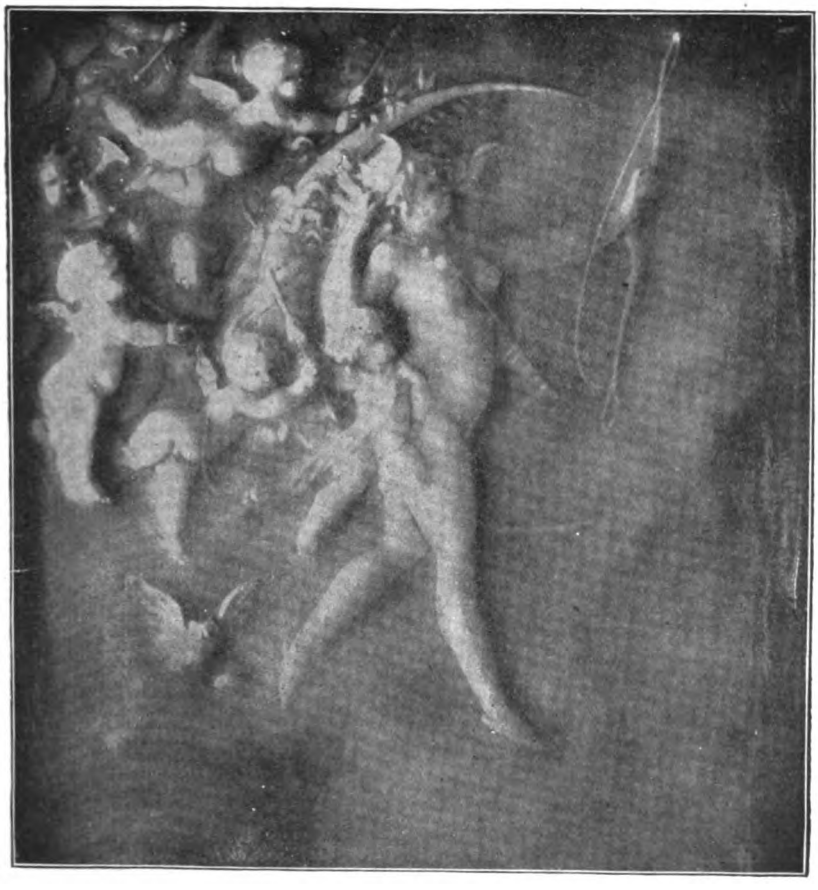
he combined with that skill the necessary chemical knowledge which the employment of coloring oxides in the base renders absolutely necessary. He must understand, too, the action of the fire, or as much at least as we know of that action, for most oxides give entirely different colorings according to whether they are subject to an oxidizing or reducing fire. For instance, the oxide of uranium, black in reduction, becomes yellow in oxidizing. It will therefore be seen how important it is to strictly maintain the fire at the same temperature during the thirty to thirty-two hours it lasts. The terms "oxidizing" and "reducing" fires are very difficult to explain, and for their proper understanding a thorough knowledge of chemical actions is necessary; but it may perhaps be sufficient here to illustrate the difference by an example. If you take lead (metal) in a crucible and melt it, it absorbs the oxygen during the process and causes a scum or oxide to form on the surface, which can be removed until the metal in the crucible is exhausted. This is therefore an oxidizing fire. But if you take red lead, which is lead in its oxidized form, put it in the same crucible and cover it with sawdust (carbon), the sawdust is consumed, and since fire is oxidizing, it takes the oxygen away from the lead and gives you the metallic lead deposited in the bottom of the crucible. This, then, is a reducing fire. Such difficulties discourage many, but M. Doat is an enthusiast, and as he himself says, it is because of these difficulties, on account of the obstinacy of the struggle and

TRIUMPHAL VASE.

the charm of ultimate conquest that he lends himself passionately to the task. With this requisite technical knowledge M. Doat combines grace and originality, facility in drawing and expert modeling. The depth and transparency attained, which give all the charm of an antique cameo, are well exemplified in the two pieces of pâte-sur-pâte illustrated. The one entitled "The Moon" is of hard porcelain, having a background of clouded Sèvres blue, and represents Phœbe in a cloud attended by a battalion of cupids. "The Kissers" is a large dish of kaolinic stoneware with the decoration in white porcelain on emerald green. The idea is poetical, well conceived and carried out, the theme being that insects are teasing the flowers, which receive them with varying emotions. At the side of each flower or plant there is the personification of the idea by a woman and cupid. But the pâte-sur-pâte process, interesting as it is, failed to satisfy M. Doat's ambition as a ceramist, and without withdrawing from the manufactory of Sèvres, he constructed at his home with limited resources and as his own private venture, a furnace from which have come numerous specimens of rare ceramics, in which are combined all the resources of the most audacious and most novel technique. To enrich his pâte-sur-pâte designs he uses as



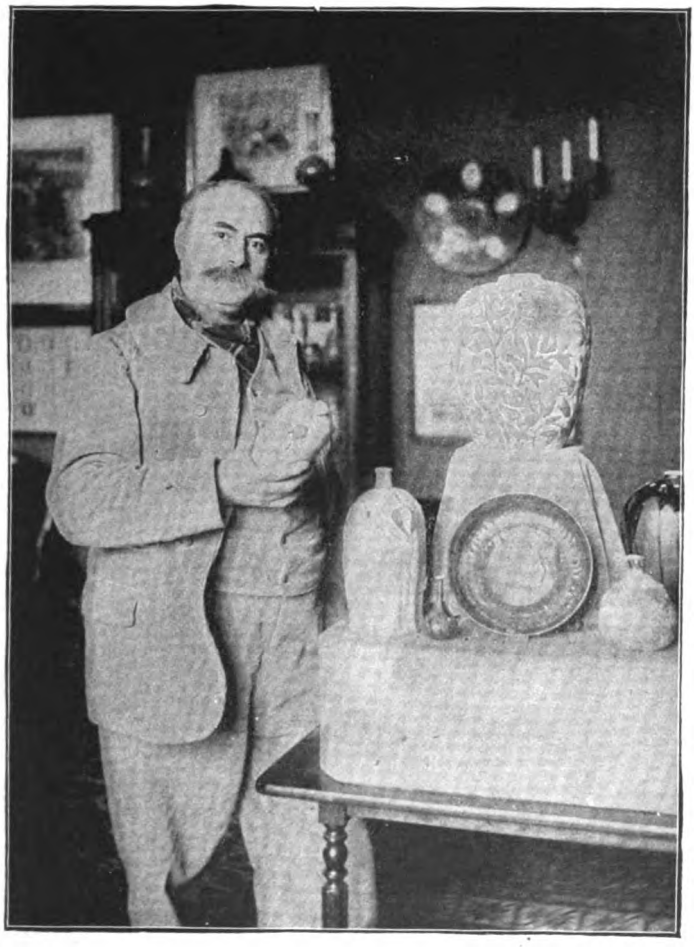
THE KISSERS.



THE MOON PÂTE-SUR-PÂTE. BY M. DOAT.

occasion requires colored pastes, glazes both opaque and translucent, underglaze colors, sgraffito and champ levé. Not satisfied with this diversity of treatment, he employs colored glazes, flammes, crystallized incrustations and those beautiful metallic effects produced according to the nature of the pigment used both by reducing and oxidizing fires. This sounds like a mere catalogue to the uninitiated; it represents in reality the triumph of technical skill. M. Doat has also succeeded, after laborious research, notwithstanding the difference in their shrinkage, in reducing to the same coefficient of expansion such totally various bodies as stoneware and porcelain. He thus profits in his decorations from the incontestable effects of the strength and solidity of the stoneware to enhance the delicacy and brilliancy of his cameos in porcelain. Of this "The Kissers," before alluded to, is an example. The illustration showing fruit-shape vases demonstrates his tendency to repudiate conventional forms and to seek inspirations from nature, which if happily chosen and interpreted often surpass the happiest creations of the human brain. That to the right is on greenish ground spotted with red, the stopper being formed with a sea-urchin in biscuit, tinted in pearl white. The center piece is an example of porcelain flammés with a yellow mat glaze, the color being very brilliant. The vase to the left is also in porcelain and is on a dark reddish brown with brilliant colors under the glaze. This has a very beautiful and curious effect. Another vase showing M. Doat's versatility is the Triumphal vase in pâte changeant, which is mauve by daylight and red under an artificial light, altogether a very charming creation. The remaining illustration shows two paper-weights, "Peace" and "War," in colored clays combined with a mat underglaze; and a small panel, "La Farandale," in pâte-sur-pâte. Recognizing the importance that all parts of a work should, to attain perfection, come from the same hand, M. Doat has never admitted any collaborator. He himself executes his ceramic stoneware and porcelain in all their parts, from the manipulation of the paste to their firing. For this reason his productions are limited. Many of them are in the principal museums of Europe, whilst others enrich the collections of noted amateurs on both sides of the Atlantic. Each one contains something of M. Doat's individuality, and their characteristics and triumphs over technical difficulties have been his best recompense.

Doccia, La, near Florence, Italy. In 1735 the Marquis Carlo Ginori established a manufactory here which is still conducted by his descendants. He died in 1757. The greatest enterprise was shown; the celebrated chemist, Wanderlein, being installed as director, and



TAXTILE DOAT.

the clay being imported from China. After imitating and reproducing Oriental pieces, the skilled artists of Doccia turned their attention to Sèvres, and later to Capo di Monti and the majolica of Luca della Robbia. Such skilful copies were produced that they deceived the most experienced. The same skill has been displayed in original creations, and much of the majolica ware made is really charming, and all of it bears the stamp of originality. When the Capo di Monti works were closed, some of the molds came into the possession of Ginori, and reproductions are issued to the present day—reproductions which bear the mark of the original factory, but without that of the modern one. M 78.

DOES, DIRK VAN DER. Master potter established at Delft in 1759, at the sign of "The Rose." He sometimes signed his monogram; sometimes a greatly simplified rose. The products were faïence of common make.

DOES, WILLEM VAN DER, brother of the preceding. Master potter at Delft; in 1764 was one of the proprietors of the manufactory with the sign of the "Three Bells." His registered mark consisted of his monogram—two V's and a D united—but it is probable that he used it but little, as on many pretty pieces, evidently of his time, we find the traditional "Three Bells" of his predecessors.

DOG OF FO. A figure seen upon both Chinese and Japanese vases, usually doing duty as a handle. Sometimes it is made as a separate figure. It is a fantastic monster with all the exaggerated points of ugliness the Orientals alone seem able to impart to such abortive creations.

DOGEN. A priest who in 1223 went to China with the Japanese potter, Kato-Shirozayemon, for five years, for the purpose of studying pottery.

DOHACHI. A Japanese potter (1840) who made an imitation of Raku ware from a red and white clay. He was himself one of the tea-drinkers. His works were in good taste and great demand, his porcelain especially displaying his artistic talent.

DOLLS' HEADS. About a dozen factories in Thuringia, Germany, are exclusively employed in the manufacture of dolls' heads. They are made by casting.

DOMMELAAR, VAN. A painter of Delft, 1580. He painted Chinese landscapes, dragons and butterflies in gold, red and yellow.

DONALDSON. A painter at Worcester about the end of the eighteenth century.

DONALDSON, W. B. The president and general manager of the Steubenville (Ohio) Pottery Company.

DONI, DE M., Seigneur of Goult. He established in 1740 a pottery in his château, and employed the best workmen he could procure. The productions were in the style of Moustiers, and the works continued until 1805.

DO-NIU. A Japanese potter of the third generation of the celebrated Ameya, the first manufacturer of Raku ware.

DON POTTERY, Swinton, Yorkshire. A pottery was founded here in 1790 by John Green, of Leeds. Marbled ware and white earthenware printed in blue and black were also produced. In 1824 the pottery was purchased by Mr. Samuel Barker, and in 1851 the firm became Samuel Barker & Son, its present style. About 1810-12 a small quantity of china was made, but only a few specimens are extant. One of these is a jug, of which Mr. Jewett tells a curious story. He states that a party of Don and Swinton potters who had been on a spree at Sheffield were returning over the moor, when, on passing the gibbet of a noted malefactor, named Spencer Broughton, on which the gaunt skeleton still hung in chains, one of them, saying, "Let's have a rap at him!" picked up a stone and threw it, knocking off two of the fingers. They were picked up and carried home as trophies, and were afterward, when trials in the manufacture of china were being made, calcined and mixed with the body. Of this body a seal was made "with a gibbet on it," and the jug above referred to. The old mark was "Don Pottery," both penciled and impressed. The present one is a lion rampant, holding in his paws a pennon enclosed in a garter, beneath which are the initials S. B. & S. From a remark in the London *Pottery Gazette* it appears as if this firm was out of business prior to 1898. M 79.

DON POTTERY.

DOORNE, PIETER VAN. Master potter at Delft in 1759. He was proprietor of the manufactory at the sign of "The Porcelain Bottle." The products were in no wise remarkable, and were markd PD.

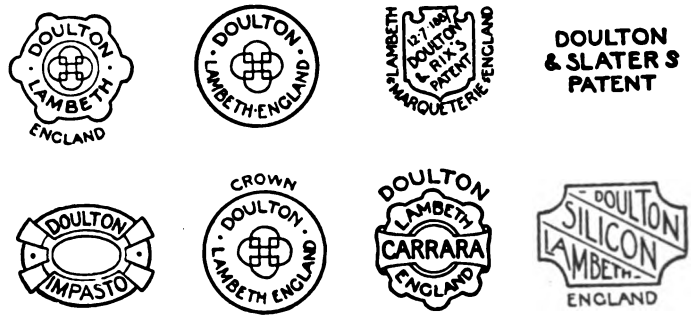
DOREZ, BARTHELEMY. (See Lille.)

DOSSI, brothers. Artists at Ferrara, Italy.

DOUAI (Nord), France. The manufactory of Douai was founded in 1780, or 1781, by two Englishmen, brothers, Charles and James Leigh, of Staffordshire, who, with many others, went over to France

to escape the persecutions directed against the Roman Catholics in England. Georges Bris, a citizen of Douai, gave them financial aid at the start, and later became a partner; and they were further assisted by the municipality, which granted them free the ground necessary for the erection of their manufactory. Later they formed a partnership with Houze de l'Aulnoit, and their manufactory became one of considerable importance, producing large quantities of table and ornamental ware, including dainty snuff boxes and delicate little pieces of perforated cream color and agate or marbleized ware that acquired the local term of "gaiole," or motley. The products were stamped with the manufacturer's name impressed in the clay, and pieces are frequently found marked Leigh & Cie.

DOULTON. In 1818 John Doulton established a stoneware factory in Vauxhall Walk, in connection with John Watts, trading under the

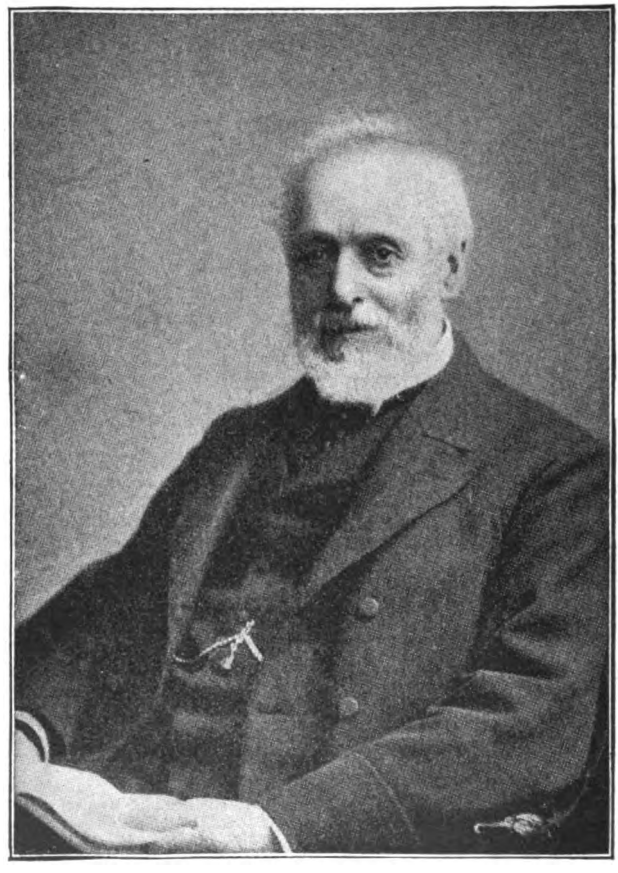


DOULTON LAMBETH MARKS.

style of Doulton & Watts. It had two kilns, and the principal production was stoneware bottles. The year 1832, memorable for the passing of the Reform Bill, was a notable one in the history of the little factory on account of the large business done in the making of "Reform bottles," which were flat vessels with necks representing the head of the King, Lord Grey, John Russell and Brougham. According to the testimony of his son, John Doulton "as an apprentice was reckoned as one of the best large ware throwers in London, and he and young Charles White, of Fulham, used to compete as to which could work the fastest. He had to work very hard indeed, and would often make a couple of hundred two-gallon bottles a day." Henry Doulton was born July 25, 1820, and entered his father's factory in 1835, succeeding to the business in 1846. Drain pipes and stoneware sinks were the staple production, the application of machinery to their making greatly increasing the output, and gradually

doing away with the flat bottom brick drains hitherto used. The demands of such cities as Liverpool and Birmingham led to the erection of works at St. Helens, in Lancashire, followed in 1848 by the establishment of further works at Rowley Regis and at Smethwick. To Henry Doulton is due the credit of having constructed the first wheel for pottery driven by steam; and it was ten years before there was another in use either in London or Staffordshire. Recognizing in his material the medium for an artistic expression, the manufacture of art goods was commenced at the Lambeth Works in 1870, and from the first a high order of merit was arrived at and achieved. There were no affected imitations of an antique type; character and originality were distinguishing features; all that was artistic found encouragement, and it was not long before a rough and crude manufacture was developed into one of artistic elegance. "What particularly arrests the eye is that each object has a style which now takes us back to the flowery periods of Doric and Etruscan forms, now to the days of medieval hospitality. The works are not the results of the common course of earthenware productions; it has cost much thought and the exercise of much knowledge and ingenuity to appoint a confederacy of labor so particularly qualified as shall work successfully to this special end." The Doulton Lambeth ware is an earthenware body, highly vitrified. The ornament is principally sgraffimento or incised outline made with a blunt tool on the wet clay and afterward colored with a brush and glazed with salt. Doulton ware is probably the highest embodiment of salt glazing ever effected. It was this glazing that gave the so-called Grès de Flandres its characteristic appearance, and this Grès de Flandres no doubt suggested the Lambeth stoneware, which is well described as "sober, quiet, harmonious and deep, full of quality." The trio who first gave artistic grace to the designs on Doulton ware were Mrs. Hannah B. Barlow, Miss Florence E. Barlow and Mr. Frank A. Butler, the latter a deaf-mute. Having revived an old process and re-created it with new forms, Mr. Doulton, recognizing that finality had not been reached, after some experimenting evolved "Silicon" ware, which is a vitrified stoneware without a salt glaze, the color effects being produced by colored clays. This was followed in 1888 by "Carrara ware," a stoneware similar in texture to marble, the surface being of a semi-glazed or eggshell character. "Marqueterie" ware was introduced in 1889, and "Crown Lambeth" in 1891. This is a fine biscuit body of ivory tint upon which the most delicate color effects are possible. By repeated glazings great richness, depth and transparency are secured. "Lambeth faïence" has the decora-

tions painted in colors under the glaze, Miss F. Lewis and Mr. M. V. Marshall having produced many noteworthy pieces. In "vitreous fresco" Mr. A. E. Pearce and Mr. J. Eyre have done fine work, the name sufficiently indicating its character. In terra-cotta modeling the name of George Tinworth instantly presents itself—the young genius who more than any other has made the name and fame of



THE LATE SIR HENRY DOULTON.

Doulton known. In 1877 the firm entered into a partnership with Thomas Shadford Pinder, of Burslem, for the purpose of making fine goods in china and earthenware, but this only existed until 1881, when Mr. Pinder retired and the firm name was changed to Doulton & Co. Mr. Bailey was appointed manager—a position he continues

to worthily occupy. At the time of the original partnership one hundred and sixty people were employed in the Burslem works, whereas employment is now found for over one thousand. Totally different to the goods they have been in the habit of making, they entered on this new venture with all their characteristic artistic enterprise. Formidable rivals were in control of the trade, but, nothing daunted, they set to work, and in an incredibly short space of time there was on the market such a rich profusion of goods, both in china and earthenware, invested with so much artistic excellence and of so marked a character as to place the firm at once in the front rank of Staffordshire manufacturers. Every piece of ware produced, from the cheapest dinner plate to the most expensive vase, bears this impress—a something indefinable, yet plainly existent, and for which we can find no better word than "Doultonesque." Sir Henry Doulton —he was knighted in 1887—in a speech to his workpeople, said: "I remember when the power we employed in Lambeth, fifty or sixty years ago, was one blind horse. It is now 3,500 horse-power, and we have twenty-five steam boilers capable of generating steam equal to 7,000 horse-power. In place of the music we have enjoyed to-night, I remember when the potters' recreation was drink and degrading fights between women; and when old Lambeth alleys, such as 'Black-boy' Alley and 'Naked-boy' Alley, were sinks of infamy and disease. By the extension of our buildings many of these old plague spots have been removed. I began my work when fifteen years old, at which age I went into the manufacturing department of my father's small business. There was no steam engine then; I had to push my wheel with my own foot. Often there was a kiln blazing just in front of where I worked. After two years I was able to make my first twenty-gallon vessel on the wheel. I wanted to be able to criticise with intelligence. That was one of my motives when I deliberately chose to acquire a technical knowledge of pottery. I felt that if I were to be judge of work, I at least should have a practical acquaintance with it. For a long time I confess I was prejudiced against the employment of women. I had witnessed the degrading effects of work on the women working in the potteries of Staffordshire, where women generally performed such heavy labor as turning the wheel and wedging the clay. I had observed, too, especially on the Continent, that wherever women did what usually is men's work the men grew to be a lazy lot. Still, the matter was thoroughly thought out, and I at last saw my way to adopt a well-organized scheme for the employment of young ladies. The success of the experiment was soon recognized, and nothing gave me greater pleasure than to

see women working in those arts which tend to beautify and adorn life. In the year 1870 the first steps were taken at Lambeth to produce art pottery. I could say a good deal on this point, but let me now just observe that the only drawback to this department of our productions is that it cannot at present be extended." Sir Henry Doulton died November 18, 1897, and his loss will be keenly felt, not only in the great factories of which he was the head, but by the many who have benefited by his unostentatious performance of many noble deeds. Many honors accrued to him during his busy life, but none were more eloquent than the bowed heads and tear-dimmed eyes of those to whom he had endeared himself when they heard of his death. He was created a Chevalier of the Legion of Honor in 1878; the Prince of Wales in person journeyed to his factory at Lambeth to confer upon him the Albert Medal of the Institute of Arts, and in 1887 he was created a knight. In the course of his life he received no less than 105 diplomas of honor, 110 gold medals and 102 silver medals. He is succeeded by his son, Henry Lewis Doulton. M 80.

DRAGONS. The Chinese and Japanese use the dragon very freely in their decorations, their significance varying with the number of their claws. The Chinese variety is almost interminable in its extent —Long, the dragon of heaven; Kan, the dragon of the mountain; Li, the dragon of the sea, and many others. Those having five claws are painted only on vases, etc., for the emperor and princes of the first and second class. The four-clawed dragon is the emblem of princes of the third and fourth class, while those with three claws are for whoever can purchase. Although wingless, the Chinese dragon is generally depicted as a denizen of the air. In all essential points the dragon of the Japanese is similar to that of the Chinese, except in the imperial rendering the former has three claws instead of five. It is depicted with great force and spirit, and is altogether an extraordinary and fearful-looking object. It is sometimes suggested as a marine monster, and sometimes as a denizen of the air. Its symbolism is unknown, but it is supposed to exert an influence on the affairs of emperors and soldiers.

DRESDEN. Under the heading of Bottger we have already given a short account of the discovery of clay in Germany and the production of the first hard-paste china made in Europe. The Meissen china manufactory was established by order of King Augustus II., of Poland, June 6, 1710, in the castle of the Albrechtsburg, at Meissen. Let it be understood that the terms Meissen, Dresden and Saxon china are all synonymous. The first color used at Meissen was blue, in imitation of the imported Oriental china. Sales were

effected at the fairs of Leipsic, and in 1714 a depot was opened at Dresden. At Bottger's death, in 1719, he was succeeded by Horold, and the manufactory, which had been in an unsatisfactory state, began to prosper, especially after the year 1730, the number of persons employed increasing from 33 in 1720 to 378 in 1750. Capable painters and modelers were employed, and they soon gave to the manufactory the character of an art institution. In 1731 Horold was

A KAENDLER GROUP.

fortunate enough to secure the services of Kaendler, a skilful sculptor, who produced numerous models of groups, vases, figures and animals partly copied from nature, partly in the English and old French style. He was the creator of Meissen rococo figures. The originality and grace of his compositions did much to increase the growing fame of Meissen, and are most highly esteemed by connoisseurs. The vase on the next page, while overloaded with flowers, is yet beautifully modeled; the marine group by the same artist being characterized by originality of conception and a truer appreciation of art. Lindener, the most celebrated of the Dresden artists, painted birds and insects from 1725 to 1745, and with him were associated

other capable men; and a more original style of decoration was aimed at and the Chinese style was entirely abandoned. From 1731 to 1733 King Augustus II. assumed the management and in 1733 to

EARLY DRESDEN.

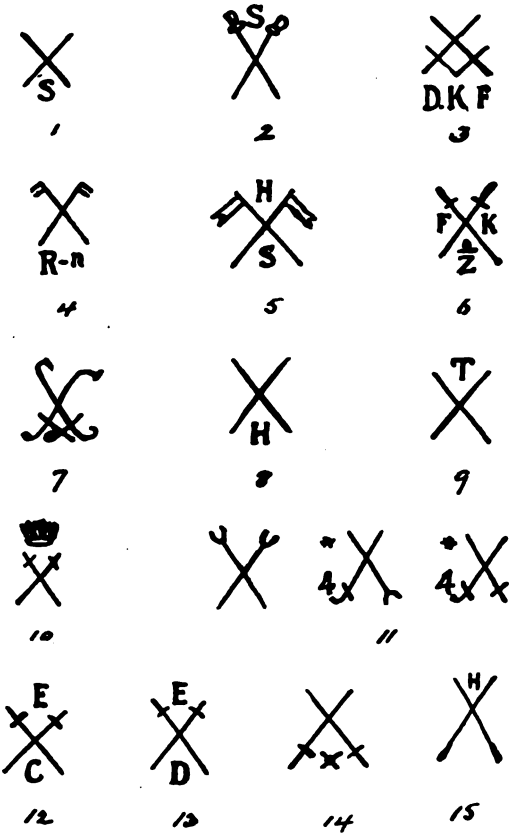
1756 it was vested in Count Bruhl. The second Silesian war caused many obstacles to the progress of the manufactory, then at its zenith, the paste probably excelling that of Sèvres, as did the figure, flower

and animal painting, while it never approached Sèvres in those beautiful ground colors for which that factory is renowned. The Seven Years' War—1756-1763—almost annihilated the Saxon pottery, the whole store of china being seized by the victorious enemy and sold for 120,000 thalers—about $86,400. Frederick the Great almost denuded it of workmen, whom he drafted to the factory at Berlin, founded in 1751. By herculean efforts Helbig succeeded in maintaining the factory during that critical period in spite of the fact that from 1745 to 1763 the china taken by the enemy amounted to 533,336 thalers—about $398,402. The manufactory was not long in recovering its position, though the style had somewhat degenerated. The direction was therefore placed in the hands of Dietrich (born 1712, died 1774), the court painter, who established a school of art and engaged a number of skilled artists and sculptors. Among the latter was Acier, a Frenchman, the most important sculptor of his time, and whose works are considered by many to be equal to those of Kaendler, though his creations are of a different order, consisting mostly of pastoral subjects and amorines. The delicacy and gracefulness of his subjects, and their pleasant attitudes, made them objects of admiration and ready sale. Under Dietrich, too, were produced those elegant antique figures and groups which are so well known. From 1774 to 1796 the character of the productions deteriorated, owing to the increased trade with Russia and Turkey, and adopting the taste that reigned there. The chief articles consisted of yellow and brown enameled and blue painted coffee and tea services and the so-called Turkish cups. In 1796 Count Marcolini was appointed director, and under the management a change was effected in the style of decoration, the forms and decorations assuming a more classical character. Pieces of this period, marked with the swords and a star beneath, are particularly appreciated. From that time the quality again deteriorated, and for a short time porcelain of a very inferior kind was made; but this was soon abandoned. In 1818 the painter Kersting was employed as head of the painting branch, to endeavor to introduce a freer and more artistic feeling which the painters had almost lost. The coulage system and the use of engines for turning oval shapes were also introduced. From 1814 to 1833 Bergrath Oppal was director. It was not until 1850 that coal was used in firing. Since 1827 the financial results were considerably improved by the invention of liquid gold by Director Kuhn, though no improvement was manifested in decoration, which became coarser and coarser. In 1863 the factory was transferred to the Triebischthal, near Meissen, as it was feared the engines

would be disastrous to the beautiful halls of the Albrechtsberg, which it was desirable to preserve as a monument of Saxon architecture. The new factory, although designed for a large output, was found inadequate for the growing trade, and enlargements were made in 1873 and 1885. Although largely employed in reproducing old models, great advances have been made at Meissen during the last few years. Pâte-sur-pâte pieces of great delicacy, exquisitely painted and modeled, for the process is a combination of both, are successfully reproduced; figure paintings of graceful character decorate in an appropriate manner some of the old unrivaled Dresden shapes, and flower painting has been much improved by a careful study of nature and flowers. The same success which is characteristic of Dresden modeling remains a dominant feature; and if the demand is sometimes for articles which it would be the rankest stretch of courtesy to class as artistic, the wishes of customers in a commercial establishment have always required and commanded attention. After the death of Kuhn the oberfactor Raithel was named director; and the manufactory owes to his successful direction

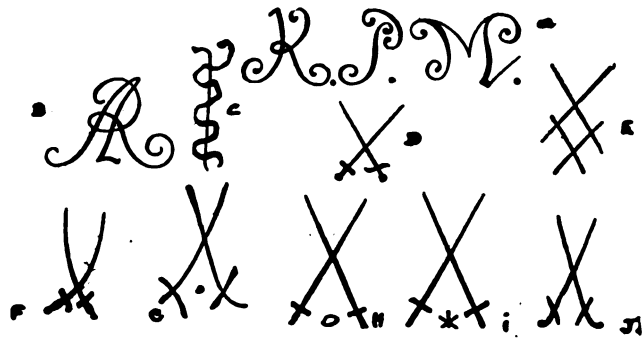
MODERN DRESDEN.
"CUPID VEILING LUNA."

during a period of twenty-five years a prosperity and enlargement such as it never had before. Our illustration shows a vase exquisitely painted—"Cupid Veiling Luna." The marks on Meissen china are very various, the best known being the crossed swords adopted in 1721. It has, perhaps, been more extensively copied than any other trademark, as a glance at the following list will show, and which does not include the imitations on Worcester and other English china:



1—Brenner & Liebmann.
2—P. Donath.
3—Dornheim, Koch & Fischer.
4—Fr. Chr. Greiner & Sohn.
5—H. Schmidt.
6—Fried. Kastner.
7—Schaller & Co.
8—Schonau Bros.
9—Carl Thieme.
10—Arnold Rub Le Prince.
11—R. Eckert & Co.
12—Bourdois & Bloch.
13—Desjardins.
14—Sluizer.
15—Hirsch.

The following are the registered trademarks used by the Meissen factories, and serve to show the various periods:



A—Konigl. Porcellan-manufactur.
B—Initials of Augustus Rex, 1709-26.
C—Caduceus on pieces made for sale. 1717-20.
D—First form of crossed swords, 1721.
E—Ditto.
F—Augustus III., 1778.
G—Ditto.
H—Ditto.
I—Marcolini period, from 1796.
J—Present mark.

DRINKWATER, JAMES. A potter at Liverpool early in the eighteenth century.

DRYANDER. (See Neiderwiller.)

DU BARRY. A beautiful pink color originated at Sèvres and named after Mme. du Barry.

DUBOIS, the brothers. (See Vincennes.)

DUBOUCHE, ADRIEN. A noble-hearted and highly intelligent man who, in common with other gifted amateurs, did much to accomplish the artistic revival of ceramics in France. He founded the museum at Limoges, which in many respects is equal to that of Sèvres. He died in 1883.

DUC D'ANGOULÊME. (See Dihl.)

DUC D'ORLÉANS. This manufactory was established in 1784, in the Rue des Boulets, Paris, but was soon afterwards transferred to the Rue Amelot, in the Pont-aux-Choux Quarter. It was then patronized by Louis-Philippe Joseph, Duc d'Orléans, and the china was marked with the Prince's cipher. In 1793 this was replaced by "Fabrique du Pont-aux-Choux."

DUCCIO, AGOSTINO DI ANTONIO DI. (See Diruta.)

DUCHESSE D'ANGOULÊME, Mme. LA. (See Dagoty.)

DUDSON, JAMES, Hanley, Staffordshire. Established 1800. Manufacturer of stoneware and jasper.

DUESBURY, WILLIAM. (See Derby.)

DU LIGE. A graceful and refined figure painter employed by Deck, of Paris.

DU PASQUIER, CLAUDE INNOCENT. The founder (1718) of the Vienna factory. (See Vienna.)

DUNBAR, J., vice-president of the Steubenville (Ohio) Pottery Company.

DUNDERDALE & Co. (See Castleford.)

DUNKERQUE. Duisberg, with Louis Saladin, attempted to establish a pottery at Dunkerque, but the Lille potters, jealous of the effort, succeeded, after a year's work, in driving them away.

DUNN, BENNETT & Co., Burslem. Earthenware manufacturers. M 81.

DUISBERG. (See Dunkerque.)

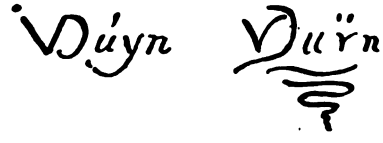
DUPAS, ENOCH. A potter of Brisamburg, near Saintes, in 1600, making stamped or impressed work in marble colors, the underneath part in green.

DUPLESSIS. Artistic director at Vincennes. (See Vincennes.)

DURANTINO, FRANCESCO. An Italian artist who contributed much to the fame of Urbino (Italy).

DUROBRIVEAN. (See Anglo-Saxon.)

DUYN, JOHANNES VAN. Master potter established at Delft at the sign of "The Porcelain Dish," which manufactory was previously directed by Johannes Pennis, from whom he acquired it in 1760. The diversified products are always carefully executed, and sometimes of exceptional richness. Besides some modeled pieces, among others bottles in the form of statuettes, there are vases richly decorated with polychrome flowers in relief, imitating enamel. The ware was marked



DWIGHT, JOHN, Fulham, England. In 1671 Dwight claimed to be able to make not only china, but also stoneware. Of the latter there is no doubt, but whether he ever succeeded in making china is very questionable. Mr. Solon has investigated the matter with much care, and the conclusion he has arrived at, from a critical examination of memoranda left by Dwight, and of pieces positively identified as of his make, is that in the present accepted meaning of the word "porcelain" Dwight never succeeded in making any. His stoneware was of excellent quality; "the mythologic figures in imita-

tions of bronze are especially remarkable; the 'Jupiter' of the Liverpool Museum and the 'Meleager' of the British Musum are worthy of an Italian artist of the Renaissance." The stoneware jugs, mugs, etc., were tinted with purple and blue, same as the Grès de Flandres; the blue stoneware was colored with zaffre; the brown with oxide of iron, and the red "porcelani" was made with Staffordshire clay, probably in imitation of that of the Elers. John Dwight was a man of considerable learning, having taken the degree of M.A. at Christ Church, Oxford, and acted as secretary to the Bishop of Chester, and seems long to have been engaged in experiments with a view of making china. Some years ago, after taking down some old buildings of the Fulham factory, and digging for new foundations, the workmen discovered a vaulted chamber which had been securely walled up, and which upon examination was found to contain a number of stoneware graybeards, ale-pots, etc. Much curious information has been gleaned from two memorandum books found among a lot of old ledgers, one of which contains many recipes; the other refers to cash and family matters. He must have been his own banker, and strange places he selected for hiding-places. Thus we read under date October 9, 1693: "In ye garret in a hole under ye fireplace 240 G (guineas) in a wooden box." Behind the door of the "old labouratory," "In ye second presse in ye said Laboura," and "Under ye lower shelf in ye kitchen near ye oven," were also hiding-places for money, to say nothing of "In two holes of that great furnace running in almost to the oven, two boxes full of milled money. May be drawn out with a long crook iron standing behind ye kitchen door." In like manner he buried his models, etc., that his descendants might not continue that branch of the trade, a precaution which did not avail him much, as up to 1862 they had been continued by his direct descendants. The works then passed into the hands of Mr. C. I. C. Bailey. Dwight's influence on English pottery cannot be overestimated, and though, as we have seen, the credit of having made the first china in

FULHAM STONEWARE.
BUST OF PRINCE RUPERT.

England cannot be accorded to him, his stoneware supplied the place of that hitherto imported from Germany, to which it was much superior; and he laid the foundation of an important English industry.

DYCK, KORNELIS VAN. Master potter at Delft in 1759. Was one of the proprietors of the manufactory at the sign of "The Claw," of which he retained the mark. Pieces of no special merit, however, are found marked with his monogram.

DYNASTIC COLORS. Early Chinese porcelain was distinguished by a particular color which predominated during the greater part of a dynasty. Thus the Tsin dynasty (A. D. 265) adopted blue as the imperial color; the Soui (581-618) took green; the Thang (618-907) white; the Ming (1368) green; the Tai thsing (1616) yellow.

E

EAGLE POTTERY COMPANY, Trenton, N. J. John B. Riley is the president, J. W. Foster the secretary and treasurer, and Elijah Mountford the general manager. There are four biscuit kilns and four glost kilns, and the manufactory gives employment to 250 hands. The staple productions are white granite and a semi-vitreous porcelain. The decorations are always in good taste. In addition they make a large number of jardinières boldly decorated and with which they have been very successful. The works were formerly occupied by Burroughs & Mountford (which see). Some successful copies of Derby shapes and decorations have recently been produced in vases and other ornamental pieces. The works are now occupied by the Cook Pottery Company.

EARTHENWARE. Broadly speaking, all pottery that is not translucent. More generally the term embraces white granite, semi-porcelains and cream-color ware. Many American wares are designated as china having none of its characteristics, and should be more properly called by one of the above designations. The ware to which we apply the name of majolica is earthenware; but as the name conveys the idea of ware covered with a colored enamel, it is wisely retained. The same rule applies to stoneware.

EAST BOSTON, Mass. (See New England Pottery Company.)

EAST LIVERPOOL. A thriving city in the eastern part of Ohio devoted almost entirely to the pottery trade. The first manufactory was built there by the Bennetts, who were quickly followed by Benjamin Harker, and from this small beginning has arisen the present large production. In 1868 the capacity was twenty-nine kilns, Rock-

ingham and yellow being the only wares made. It was not until 1872 that white ware was produced by Knowles, Taylor & Knowles. In 1898 the number of glost and biscuit ovens had increased to 154, and in addition 85 decorating kilns. The end of last year there were 223 ovens and 118 decorating kilns. Distinctively an English industry and founded by Englishmen, it is worthy of note that the trade has gradually drifted into the hands of Americans—an evidence of the adaptability of American brains and capital. The population is about 20,000. The following is a list of potteries there:

Brunt. Wm., Pottery Co.
Burford Bros. Pottery Co.
California Pottery Co.
Cartwright Bros. Co.
Croxall Pottery Co.
East Liverpool Pottery Co.
Goodwin Pottery Co.
Harker Pottery Co.
Knowles, Edwin M., China Co.
Knowles, Taylor & Knowles.
Laughlin, Homer, China Co.
McNicol, D. E., Pottery Co.
National China Co.
Potters' Cooperative Co.
Sèvres China Co.
Smith-Phillips China Co.
Standard Pottery Co.
Taylor, Smith & Taylor Co.
Thompson, C. C., Pottery Co.
Vodrey Pottery Co.
West End Pottery Co.

EAST MORRISANIA CHINA WORKS, 152d Street, New York. Cheap earthenware exclusively is manufactured here. The trademark is an eagle and the initials of the proprietor, D. R. (D. Robitzek).

EASTWOOD. (See W. Baddeley.)

EBELMAN was the successor to Alex. Brongniart as director of the Sèvres factory in 1847. He revived the manufacture of pâte tendre at Sèvres, and was the first in Europe to revive the process now known as pâte-sur-pâte. He died March 31, 1852.

EDGE, MALKIN & Co. succeeded Cork & Edge at the Newport Pottery, Burslem. Cork & Edge introduced a process of inlaying the patterns in the ground body, but of different colors to it. At the Newport Works, established in 1866, Messrs. Edge, Malkin & Co. manufacture encaustic tiles, the other works being devoted to earthenware. The firm is now in liquidation. M 82.

EDWARDS, JAMES. A working potter who by his application and industry established himself as one of the prominent manufacturers

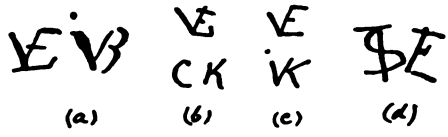
of Burslem. He succeeded to the works made celebrated by John and James Rogers, and successfully conducted them from 1842 until his death.

EDWARDS, JAMES and THOMAS, Kiln Croft Works, Burslem, 1825 to 1842. They made the ware for the first Cunard steamer that ran from Liverpool to Boston, the "Britannia," the pioneer steamer arriving in Boston Harbor July 18, 1840. We give an illustration of a jug in the possession of Mr. F. P. Abbot.

EDWARDS, JOHN, Fenton. Earthenware. Closed prior to 1898. M 83.

EDWARDS, WARNER. An enamel painter of Henley. He died in 1753.

EENHORN. There were three ceramists of this name at Delft in the seventeenth century—Wouter Eenhorn in 1658, and his two sons, Samuel and Lambartus. Wouter and his son Lambartus produced polychrome work of such beauty of form and quality that, according to M. Havard, it was to their products that the "Magistrat" of Delft turned when he wished to make a gift to princes or their representatives. Lambartus was the pupil of his uncle, Willem Kleeftijus (see this name), and continued and perfected the style of his teacher. A rival to Lambartus arose in the noted ceramist Louwys Fictoor (see this name), whose ware, carrying the almost identical monogram, may easily be confounded with that of Eenhorn, since it displays the same perfection of manufacture and the unusual delicacy of treatment. Lambartus, who was established in Delft in 1691, at the sign of "The Metal Pot," marked with his own monogram, to which he added the initials of his foremen (Jan V. D. Buergen at first, and later the two Van der Kloots) (see marks *a*, *b*, *c*). Samuel was established in 1674 at the sign of "The Greek A," where he produced works of exceptional delicacy—dishes, bottles, vases, etc.—in azure engobe, or sometimes greenish, with flowers, groups of animals or figures of artistic merit, delicately colored in pale blue, enhanced by



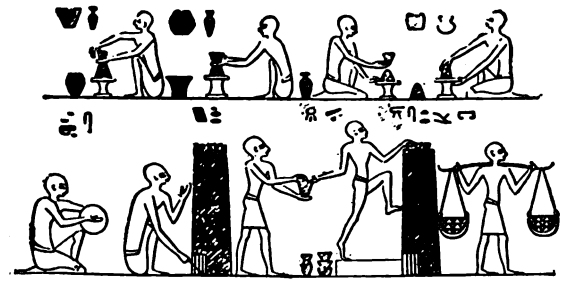
an outline which gave special character to his work. He used the mark *d*, "which mark has by several ceramic historians been wrongfully attributed to a certain Suter van den Even, of whom no trace can be found at Delft, and whose name even is not Dutch." (M. Garnier.)

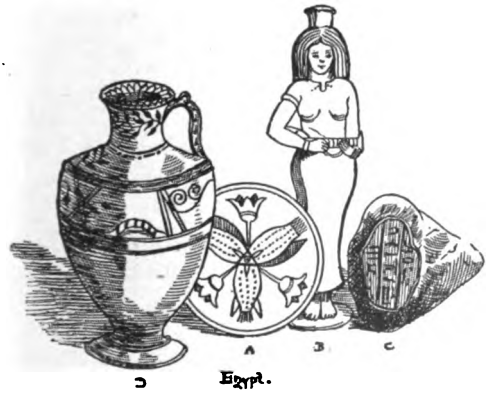
EGG POTTERY. Awata ware is sometimes so designated on account of the pronounced tint of its prevailing yellow color.

EGGSHELL CHINA. First made in China, at King-teh-chin, about 1410, and so called from its remarkable thinness. The Emperor gave rewards to those making the finest, and it reached its greatest excellence about 1465. When made with the "rose back" it is particularly beautiful, as the transmitted light gives the color all the softness of a pink lining of a shell. In modern times it has been made by nearly every factory of prominence in the world. Mr. L. Jewett claims that of Coalport to be the finest.

EGLERT, JOHANN TOBIAS. A potter of Nuremberg, 1791.

EGYPT. The origin of Egyptian pottery, like the history of Egypt, is largely a matter of theory, if not of guesswork. The settlement of the country is variously placed at 5004 B. C. down to 2700 B. C.; the building of the pyramids from 4235 to 2350 B. C. The world was startled several years ago by the finding of some broken pottery at the base of the statue of Rameses II., which, reckoning the alluvial deposit of the Nile at three and a half inches per century (an accepted fact), made the age of the pottery found there thirteen thousand five hundred years! Mr. W. C. Prime ingeniously and plausibly disposes of any such antiquity. That Egypt made pottery before the building of the pyramids is evidenced by the existence of older hieroglyphic writings containing pictures of pottery. Steatite images of deities, vases, etc., covered with colored enamels, which have been fired, have been found dating from 2000 B. C.; and though these may not strictly be classed as pottery, they are valuable as fixing the knowledge of the Egyptians of a fusible enamel at such an early date. These colors have never been excelled in modern times. The Egyptians made two kinds of pottery—one ordinary soft earthenware, the other made of a fine sand and covered with a thick silicious glaze, holding a middle place between earthenware and china. The pottery was all of a utilitarian character, from three-inch vases for oil up to the large jars, three or four feet high, for containing meats, etc. Mortuary vases, cones six to ten inches long engraved with legends relating to the dead, and small images, are all found in Egyptian tombs. The Egyptians were very early acquainted with the





Egypt.

LOTUS VASE.

potter's wheel, as appears from a painting on the wall of a tomb at Beni-Hassan, an illustration of which we give on preceding page. The lotus was frequently used as a decoration, which on the whole was sparingly applied. Under the Ptolemies Greek art superseded Egyptian, but none of the higher classes of Greek artistic pottery was made in Egypt. This in turn was superseded by that of Rome. Lamps of this period covered by a hard green glaze have been found. The question as to whether a tin enamel was known to the Egyptians has been a moot question for some time, but in 1856 small fragments of a vase were found at Thebes covered with such an enamel and decorated with hieroglyphics and figures in purple enamel. The group illustration shows (A) Egyptian blue enameled pottery cup; (B) enamel steatite figure, the god Anubis; (C) red pottery cone; (D) red polished terra-cotta bottle. Until 1799 Egyptian hieroglyphics were a hidden mystery, but these were made plain by the discovery of a tablet called the Rosetta stone, which was dug out of the soil. It was of black basalt, about four feet in height, and was inscribed in three languages with a decree issued by the Egyptian priesthood at Memphis about 200 B. C. One of these languages was Greek; the other two were respectively the priestly and popular writings of Egyptians. By a comparison of the known with the unknown Egyptian characters a key was found to decipher the priestly hieroglyphics,

LENTICULAR PHIAL.

rendering it possible to comprehend the monuments of ancient Egypt and to unlock the secrets of Egyptian history.

EGYPTIAN ENAMELS. Babylonian glazed bricks four thousand years ago were coated with enamels, which analysis has proved to owe their fusibility to silicate of soda and lead, their bluish-green color to copper, their yellow to antimony, and their brown to iron. It was considerably later before these enamels were applied to true pottery.

EGYPTIAN-BLACK or basaltes ware owes its color chiefly to iron. Ware of this description had been made in Staffordshire long before Wedgwood's time, probably by the Elers (1690-1710), but it was considerably improved by Wedgwood. A very fine specimen, of which we give an illustration, is the lamp in the Practical Museum of Geology, London.

LAMP IN EGYPTIAN-BLACK WARE. WEDGWOOD.

EHRENRIECH, DR. (See Marieburg.)

EISENBERGER STEINGUTFABRIK. The china manufactory of Geyer & Korbitz, Eisenberg.

ELBOGEN. Messrs. Springer & Co. have a large china factory here, established in 1815. They employ about 1,000 workpeople, and make a large variety of useful and ornamental goods. Probably the

largest oven in the world is here, being twenty-four feet in diameter and three stories high. The ware made under M. Haidinger acquired some celebrity. M 84.

ELERS, THE BROTHERS. The coming of the Elers brothers to Staffordshire was an event of momentuous history to that district—one not easy to overrate. Butter-pots and tiles were then the chief product, the potters for the most part uneducated men, with but little desire to improve their wares. Following the fortunes of the Prince of Holland (William III.), and belonging to a noble family of Saxony, they eventually came to Staffordshire. David had already established a shop in London, and, it is possible, remained there, selling the wares that his brother, John Phillip, made. The date of his, or their, arrival in Staffordshire is uncertain, but we know that the business had been running some years in 1698. A lonely spot called Bradwell Wood, midway between Wolstanton and Burslem, and where a good clay was abundant, was selected as a site for their works, while at Dimsdale, a mile away, they stored their goods and probably resided. The utmost secrecy was observed at the little works, and though help more or less skilled was abundant, the Elers were careful to employ only the least intelligent. From the red clay found at Bradwell they made a dense, semi-vitrified body which differs from china only that it is not transparent. This clay was thoroughly levigated and sifted and subjected to a very hard fire. Nor was less care taken in other branches of the manufacture, the turning being excellently done. The ornamentation was strikingly original in its application. Chinese pieces, which were probably the models from which they worked, had molded embossments; but the process employed by the Elers differed materially. Where the ornament was to be applied a little lump of wet clay was applied, and on this a metal die containing a sunk ornament was stamped, the surplus clay from around the stamp being carefully cleaned away. It was exactly similar to impressing a seal on sealing wax. If the design required several seals, the leaves, etc., were afterwards connected with stems made by hand. They seem to have altogether confined their attention to small pieces, such as teapots, teacups, etc. The Elers

ELERS WARE.

were no doubt the first to introduce salt glazing into Staffordshire. The smoke from their ovens was so voluminous as to attract the attention of the then eight Burslem potters, who gathered around the oven to protest against the volumes of smoke they emitted. The old story that Palmer, of Hanley, in 1690, through the overboiling of a pot of brine, discovered and afterward practiced salt glazing is highly improbable, for the silicate cannot be produced by other means than in a closed oven heated to a very high temperature. An old workman named Steel, who could remember the Elers at work, stated to Wedgwood, and it was noted by him at the time, that salt glaze ware was first made by them. We have previously alluded to the selection of workmen of poor mental capacity by the Elers, so as the better to guard their secrets. Even the goods were taken, when finished, to Dimsdale in the night. Among the men who were employed there were two named Astbury and Twyford, both small master potters, who feigned idiocy the better to penetrate the secrets of their employer. They succeeded in witnessing all the processes, and for the space of two years kept up the deception, and by their shrewdness acquainted themselves with the carefully guarded secrets. In the Hanley Museum there is a teapot of black ware with embossed foliage made and given by Twyford to Enoch Wood, going to prove that Twyford availed himself of the information he had obtained, and also that the Elers also made black ware, which was later to be perfected by Wedgwood. Of Astbury we have already spoken elsewhere. Twyford's descendants are now manufacturing sanitary ware at Hanley. In 1710 the Elers are said to have left Staffordshire, John Philip becoming connected with the glass manufactory established at Chelsea in 1676 by Venetians under the auspices of the Duke of Buckingham, and later, with the assistance of Lady Barrington, set up a glass and china shop in Dublin and became prosperous.

EL FRATE. Among the artists who gave Ferrara its reputation was one who signed "El Frate" about 1544. Some of the pieces so signed are beautiful specimens of blue and white majolica, while others are but weak productions, though carrying the same signature.

ELIZABETHAN WARE. The salt glaze stoneware of Elers and his successors was by collectors erroneously ascribed to the Elizabethan era. Stoneware jugs mounted in silver and pewter used at that period have now pretty conclusively been proved to be of German manufacture.

ELKIN, KNIGHT & Co., Lane Delph, were manufacturers of earthenware about the end of the eighteenth century.

ELLE (Island of). The products of this manufactory do not

merit especial notice. The favorite decoration consisted of a bird holding a branch of leaves in its beak, usually well drawn in manganese outline or sometimes in camaieu of slaty blue. Sometimes this subject was painted in harmonious colors with a pale blue ribbon back of the bird. The body of the ware is thick, with dull crackled enamel. A specimen in the Sèvres Museum is marked with the two names, "Joseph Girard Notere," "Pierre Girard, 1741."

ELTON, Sir E. H., Bart., Clevedon Court, Somerset. Before he succeeded to the title Mr. Elton turned to account a common bluish clay found on the neighboring moors and made a distinctive kind of ware with it, continuing its manufacture after he succeeded to the title. He worked for years with only the assistance of a boy, and will employ no one who has worked in any pottery besides his own. The decoration of the articles produced is of the same clay as the ware itself, colored with various oxides, and it is a distinguishing characteristic that the same pattern or ornament is never repeated. M 85.

ELY TILES. (See Encaustic Tiles.)

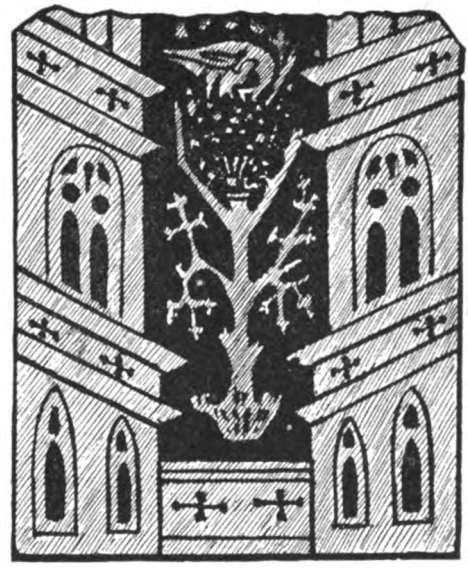
EMAUX OMBRANTS. Shading enamel, or emaux ombrants, was a term given a process of decorating pottery that was introduced about 1844 by the Baron du Tremblay at the manufactory he had established at Rubelles, near Melun. The process was as follows: An impression was made on the paste of the piece to be decorated, which after the first firing was covered with a translucent, easily fused glaze, variously colored green, blue or violet by oxide of copper, cobalt or manganese. When fired this glaze presented a perfectly smooth surface, but the hollow parts of the decoration, owing to the greater thickness of the glaze, gave strong shadows, while the raised portions were lighter in color and contributed to the decorative effect. Notwithstanding its excessive cheapness and artistic character, this method of decoration has had but little success. The enamel was too soft for the ware to be of practical service, and was not hard enough for decorative purposes; but from time to time this beautiful style of decoration has been revived, and it is to be hoped may ultimately be more satisfactorily produced.

EMERY, F. J., Cobridge, Staffordshire. Manufacturer of earthenware. The works were closed in 1893.

ENAMEL. A term used in contradistinction of glaze, when the glaze, through the addition of tin or other substances, becomes opaque and obscures the body on which it is applied. It is therefore preferable to speak of a stanniferous (tin) enamel rather than a stanniferous glaze. Enamel was used in Egypt, Babylon and Assyria, and then all trace of it was lost until it reappeared among the Arabs, only

to again disappear until revived by them in Spain. After another interval it was perfected by Luca della Robbia and came into general use in Italy and was carried by Italian workmen to France, becoming then generally known.

ENCAUSTIC TILES. Tiles beautifully potted and designed were made by religious orders in England as early as the thirteenth century, and their manufacture continued until the sixteenth century, and occasionally in some districts as late as the eighteenth. Kilns have been discovered in Worcestershire, Staffordshire, Wiltshire, Shropshire and Gloucestershire. The earliest were of one color, with incised or embossed designs. Inlaid tiles were next produced, the impressed design being filled in with clay of another color. They were distinguished by richness of design and perfection of workmanship. The early ones were of two colors only, but later these were increased. Much had been borrowed from Italian and other Continental sources, but nowhere did the manufacture attain greater excellence than in England. The designs were of infinite variety, including conventional foliage, heraldic cognizances, animals, texts, mottoes, single figures and composite pictures. The tiles of the Abbey Church, Malmesbury, Westminster Abbey, Lilleshall Priory, Malvern Priory, Ely Cathedral, Chertsey Abbey and other ancient ecclesiastical buildings in Ireland and Scotland may be cited as containing examples of these different varieties. The illustration is from a tile in Great Malvern Priory. After lying dormant so long the manufacture of these beautiful tiles was revived by Herbert Minton in 1840, and is still carried on by his successors.



ENGLAND. We have already briefly mentioned the pottery of the Anglo-Saxon and Anglo-Roman periods, after which there is a long hiatus; and it is not until the thirteenth century that we find

any record of pottery manufacture. Some examples which have been assigned to the fourteenth century are usually covered with a dull green glaze, and are of rude design and manufacture. We give an example of a jug from the Willett collection. It seems strange that the religious orders who during the same century produced the beautiful encaustic tiles so conspicuous for artistic and technical perfection did not produce vessels of beautiful form and ornamentation. Pilgrim bottles and vessels, with loops for suspension by means of a leathern thong, partially or wholly glazed, and sometimes marbled with white and red clays, are contemporary with these tiles, without possessing any of their artistic qualities. The same green glaze is found on the rattles in the form of heads and ruffs assignable to the time of Elizabeth (1558-1603), and on candlesticks and tiles which are characteristic of the prevailing architectural styles. The body was buff colored, fairly hard, and generally glazed with lead. To the same period belong the wide-mouthed stoneware jugs, of which we give an illustration, and which have been somewhat hastily ascribed to Fulham, though Dwight's patent was not granted until 1671. The graybeards, or bellarmines, belong to the time of James I. (1603-1625). Neither these nor stoneware were of English origin; and it is to the Wrotham and Staffordshire slip decorated ware—suggested, possibly, by the Durobrivaen pottery made towards the middle of the seventeenth century, that we find exemplifications of a distinctly English production owing nothing to foreign influence. The earliest piece of Wrotham ware is a jug dated 1656. Toft seems to have commenced manufacturing his slip dishes about 1660. The illustration of the Wrotham tyg shows one of the earliest productions

EARLY GREEN GLAZED PITCHER.

in this style, while the slip dish, which is dated 1726, is an evidence of the late date this curious, if archaic, style of decoration was continued. The matter is more fully treated elsewhere. Although Wrotham (in Kent) and Staffordshire were the chief seats of manufacture of this slip ware, it was copied all over the country — almost everywhere where a potter's kiln existed. In the seventeenth century ware made at Delft in imitation of Oriental porcelain had attained great popularity, and Dutch workmen brought the art to England. The industry was at first confined to Lambeth, and though there is no positive proof of where these potteries were situated, examples are in existence dated

STONEWARE JUG.
ELIZABETHAN.

TYG OF WROTHAM WARE.

1634. From Lambeth the art spread to Bristol, Liverpool and Staffordshire; but in none of these places did the production equal those of Delft. (See Delft.) Of much more importance was the Fulham stoneware made by Dwight, though, like Delft, it was not indigeneous to the country—the one being borrowed from Holland, the other from Flanders or Germany. It has long been customary to speak of this stoneware as "Grès de Flandres," and the appellation has been considered as a misnomer; but recent investigations have proved that stoneware was made in considerable quantities at several

DISH OF SLIP WARE.

places in Flanders, notably at Raren, Bouffioulx, Chatelet, Pont-de-loup and Nanian, so that we may feel justified in continuing to use the name, at least in a generic sense, though Dwight's patent was for the manufacture of porcelain, and though he has been usually credited with first making china in England, he appears to have produced only a very fine stoneware of high artistic excellence. The growth of that vast industry which has its existence in the group of towns collectively known as "The Potteries" owes much to the advent

of John Philip and David Elers, who came to England in the train of William of Orange, and shortly afterward—some time prior to 1692—established themselves in the neighborhood of Burslem. There were seven or eight small factories here, chiefly employed in making butter-pots for consumption in the immediate neighborhood, the men engaged in their manufacture being rough and untutored, so it is scarcely to be wondered at that the Elers, being of gentle birth—they sprang from a noble Saxon family—should maintain a dignified reserve and conduct their operations with what secrecy they could. But the rythmical turn of the wheel, the pots assuming shape at the touch of their hands, had unconsciously inspired them with a desire

TEAPOT, STYLE OF ELERS.

for something better, and the latent spark was developed when they saw the beautiful pieces made by the Elers. The story of the discovery of their processes, their introduction of salt glazing into the district, has been told elsewhere, and need not be recapitulated here. (See Astbury, Elers, Salt Glazing.) Having once seen beautiful models, the artistic growth of pottery in Staffordshire was of extraordinary strength, and results were obtained of distinctively native character and which owed nothing to foreign influence. In this category we may even include the salt glaze ware, although the mere process of salt glazing did not originate in England, but had been extensively used in Germany. This latter had nothing in common

with the delicately modeled pieces of Staffordshire, decorated with arabesques and of extreme thinness and delicacy—its first adaptability to ware for table purposes. The ornamentation was applied in a variety of ways, at first being stamped with seals same as the Elers ware. Later it was sprigged on the piece—that is, flowers and ornaments were made in separate molds and stuck on with slip, or covered with embossed figures made in the mold itself, which at that time was of copper. The final enrichment was by enameling—an art introduced by foreigners, who bought the plain ware and decorated it. This style of decoration was first introduced in a manufactory by Daniel, of Cobridge (see Daniel), whose example was quickly followed by other manufacturers. Agate ware mas made largely by Dr. Thomas Wedgwood (1731), son of Thomas Wedgwood, of the Overhouse Works, Burslem, and was another distinctly English production, and was made by many manufacturers throughout the district. So, too, is the tortoise-shell ware made by the use of manganese spotted on the ware with a sponge, and which in the hands of such potters as Whieldon and others assumed very charming effects. These improvements were not the work of a moment, but the result of careful study and experiment. The native clays which before had been exclusively used had in part to be discarded, and the clays of Devon, etc., experimented with until something like satisfactory results were obtained. Astbury in 1720 discovered the use of flint, and eventually succeeded in finding out the proper proportion to use, establishing the manufacture of English earthenware—an industry which has spread all over the world. Whieldon (1740-1798) greatly improved its quality, and, in fact, left Wedgwood but little to do to convert it into his queensware. In

WHIELDON COFFEE POT.

1750 E. Booth introduced his method of glazing by dipping the ware into an improved glaze kept in suspension in water. About the same time Ralph Daniel introduced plaster-of-paris molds in place of the metal ones formerly used. Pressing at this date almost entirely superseded casting. The plaster molds would not produce the same sharpness as the metal ones, and the dainty embossed pieces gradually disappeared. These gave place to models of animal and vegetable forms, such as the cauliflower, melon and pineapple wares, which had a tremendous sale and which were distinctly original in conception. Before passing on to Wedgwood and his contemporaries it will be well to consider for a moment the influence exercised on English ceramics by such men as Astbury, Whieldon, etc., and to ask ourselves as to whether in the reflected glory of Wedgwood's fame they have been given their full meed of praise. It must be remembered that of chemical knowledge they had none, nor was the chemistry of pottery ever dreamed of, so that their discoveries and improvements were the result of keen observation and patient investigation. Astbury's discovery of flint was of vital importance and alone made possible the improvements effected by Wedgwood. Its grinding under water was patented by Benson in 1726; so that the proper proportions having been fixed by Astbury, and the easiest method of preparing it by Benson, the improvements effected by Whieldon, a most painstaking and intelligent potter, really left little for Wedgwood to accomplish in this direction. Among other things, Whieldon discovered the green glaze which was so effectively and harmoniously used on the cauliflower and other ware. Some of his teapots were made in a double shell, the outer one being pierced in a design of flowers and leaves, covering the shape with a sort of lace work; and though imitations of Chinese pieces, their decoration of tortoise-shell gave them an individuality all their own. It must be borne in mind that the potter had then no assistance from the painter, and had chiefly to rely upon his shapes and their applied decoration for his success; but having achieved what success he had, he is entitled to his measure of praise, and the name of Astbury at least ought to be as familiar in our mouths as that of any other English potter. Of Twyford, Astbury's fellow-

WEDGWOOD CUP.

workman at the Elers, we have scant information, though his descendants are still making pottery at Hanley. The name of Wedgwood had long been a prominent one in Staffordshire, but it was reserved to a sickly youth, named Josiah, to raise it to a prominence never before or since obtained by any English potter. In another place sufficiently full details of his work and his influence on English ceramics have been given, but it may not me amiss here to quote Professor Church's estimate of his work; and although at first we may be inclined to consider his conclusions as somewhat arbitrary, a little reflection will, I think, convince even the most ardent admirer of Wedgwood that there is a large measure of truth in the learned Professor's criticism. It is at least more healthy than the indiscriminate praise lavished on him by the bulk of his admirers. Professor Church says: "His improvements in the potting or fashioning of wares and in their body or paste were very great and perfectly legitimate. So much as this cannot be said of the artistic value of his work. Accepting, and even encouraging, the prevailing fashion of his day, Wedgwood adopted the rather shallow conceptions of classic art then in vogue. Classic forms stimulated and satisfied his effort toward mechanical perfection; classic finish he tried to render by those fine pastes which he was ever elaborating. But no amateur of antique gems would accept Wedgwood's copies as adequate translations of the originals. The lens reveals the roughness of grain, the lumpiness of surface and the faults of contour in the one, while it serves to bring out the beauty of the other. But to the portraits of contemporary celebrities which Wedgwood produced in jasper and basaltes ware, to his works after Flaxman, and to a great deal of his 'useful' ware, must be accorded the very highest praise.

OLD WEDGWOOD WARE VASE.

In a word, Wedgwood was a great potter, but not a great artist. In the former capacity he influenced favorably the whole subsequent course of English ceramic history; less happy in their results have been his fondness for the antique and his lack of originality. But it would be most unfair to the memory of Wedgwood if too much stress were laid upon this critical view of his methods and styles. The improvements which he effected in the ceramic industry of the country were too substantial to be seriously compromised by the want of spontaneity in the artistic character of much of his choicer ornamental ware." Wedgwood's triumphs gave birth to numerous imitators, and his shapes were copied most extensively. John Turner (1762-1786) was one of the most successful. William Adams, a personal friend of Wedgwood, was another. Palmer, Neale and Voyez were utterly unscrupulous in their piracy of Wedgwood's works, the latter actually going so far as to stamp his wares with Wedgwood's name. Other contemporaries of Wedgwood were Enoch Wood (1783-1818), Job Ridgway, John Davenport, Josiah Spode, Thomas Minton and others, of whom mention will be made later. About 1758 extensive works were started at Leeds, where black basaltes and perforated cream color ware were made. In 1765 the works afterward celebrated for their manufacture of Rockingham were started. Bristol had a cream color factory in 1786, and the Herculaneum Works at Liverpool took a new lease of life in 1796. The process of transfer printing was largely practised in Liverpool from 1752 by Sadler & Green, and the ware was for some years sent from Staffordshire and other points to be printed. In the middle of the eighteenth century many English potters emigrated to France and there introduced the manufacture of English earthenware. Before entering on the nineteenth century, when the manufacture of both china and earthenware were frequently carried on by the same manufacturer, we will briefly review the progress made in the manufacture

DISH, CREAM WARE OF LEEDS.

of china. The earliest mention made of china in England was in 1588, when Lord Treasurer Burghley offered one "porrynger of white pooselyn" garnished with gold, and Mr. Robert Cecil "a cup of grene pursselyne." Cavendish, the celebrated traveler, in the reign of Queen Elizabeth, is supposed to have presented his royal mistress with the first vessels of porcelain which ever came to England. With the exception of Worcester, we have no definite information as to the founding of any of the great English china manufactories. It will perhaps be well to note that in Europe an artificial porcelain had been made in Florence as early as 1575; that Bottger, at Meissen, in 1709, had produced hard porcelain; that in France artificial porcelain had been made at Vincennes in 1745, and afterward continued at Sèvres. By this time the secret of the Meissen china had been diffused through Europe, and there were manufactories at Vienna, Anspach, Bayreuth, Hochst, St. Petersburg, Berlin, Baden, Limbach, Ludwigsberg and other places in Germany. Probably none of the English factories were in existence much before 1745, the earliest dated example being a goat cream-jug of Chelsea make—though usually ascribed to Bow—bearing that date. The introduction of bone ash by these English factories constituted a distinct departure from any formula than in use. But as much cannot be said for the decoration, the designs being mostly copies from Chinese and Japanese originals, which, applied to English forms, were exceedingly incongruous. Later the paintings of Meissen and Sèvres were copied, the marks of these factories being also boldly appropriated. In spite of this, many beautiful forms and colors were produced, rivaling those of Sèvres and Dresden. The best known of these colors were the distinctive Chelsea claret color, mazarine and turquoise. Chelsea figures are well known for their beautiful molding and careful potting, and, to quote Mr. Binns, "express perfectly the dainty taste of the period." At Plymouth, owing to the discovery of chint clay in Cornwall, by Cookworthy, the manufacture of natural china was commenced, Cookworthy's patent being dated 1768; but for some reason the venture was not successful, and in 1770 the whole concern was removed to Bristol, and a little later sold to

CHELSEA SNUFF-BOX.

Richard Champion. There was a good deal of litigation over Cookworthy's patent, which was, however, upheld, and which was transferred to a syndicate of Staffordshire manufacturers, who continued to make hard china at the New Hall Works, Shelton, from 1778 to 1810, when bone china superseded it. It is believed that at Lowestoft from 1757 to 1802 hard china was also made, and perhaps no ceramics have excited more controversy than this Lowestoft china. About the year 1775 the Bow Works were purchased by William Duesbury, of Derby, who had previously (1769) become the owner of the Chelsea Works. The plant, however, was not removed to Derby before 1784. The same uncertainty which exists respecting the founding of the Bow and Chelsea works is applicable also to Derby, but we know that Duesbury became connected with it in 1756, and that it was already in full working order. Three generations of the Duesburys were in control of the Derby Factory from 1756 to about 1815, when it was leased to Robert Bloor. A high standard of excellence had always been maintained, imperfect pieces had never been allowed to leave the factory, and in consequence there was a large accumulation of them. These Bloor had decorated and sold, much to the injury of the reputation of the factory. After the death of Bloor the business declined, and the works were closed in 1848. After the consolidation of these three factories bone was used in the compositon of the paste, and later china clay. About 1772 a china manufactory was started at Caughley, which was afterward merged in the Coalport Works across the river, and which have been carried on uninterruptedly ever since, and always under the name of John Rose & Co. It was at the Caughley Works that the celebrated Willow pattern plate was first engraved. At Liverpool, late in the 18th century, Richard Chaffers, Christian and Seth Pennington were all making china, the latter under date March 18, 1769, having left a recipe for a bone china body. The Pinxton Works, made famous by the paintings of William Billingsley, were in existence in 1795, and in the same

PLYMOUTH.

ROYAL WORCESTER.

year that at Church Gresley was founded, though no specimens have been positively identified. It must have been of a high order of merit, as Queen Charlotte sent an order for "the handsomest dinner service he could make," regardless of price, though the order does not appear to have been executed. The Worcester Factory, as we have before said, is the only one of the great English china works of which we have any authentic proof of its inception. It was founded in 1751, and in the original partnership deed is described as the Worcester Tonquin Manufactory. Dr. Wall and Mr. William Davis were the responsible partners, and, like the other English and foreign works, the first productions were imitations of Oriental models. Transfer printing is claimed as a Worcester invention, and there seems good grounds to suppose that it was independent, although concurrent with that of the Sadlers, of Liverpool. About 1764 the works were strengthened by the employment of Chelsea painters, and a marked improvement was effected. Royal patronage

EARLY LAMBETH DOULTON.

was bestowed on the firm, and although there was something like a break in the continuity in 1840, the manufactory with various changes in the proprietary is continued to the present day. We now resume the continuance of our sketch from the time of Wedgwood. Owing to improvements in manufacture, the industry had now taken a great extension. English wares were largely exported to all countries, facilities of transportation were largely increased, cheapening the cost of production, royal patronage was freely bestowed on local industries, and a general time of prosperity reigned. The end of the eighteenth and the beginning of the ninteenth centuries saw the inception of several important factories which have continued to the present day. Josiah Spode started business in 1770 and was soon joined by William Copeland. They made an excellent earthenware body and in 1800 commenced making china. Since that time various bodies have from time to time been added, and their

productions are extremely varied. The corner-stones of the old parish church at Stoke were made by Spode of four entirely different bodies. An ironstone china made in 1805 found a whole host of imitators. They claim to have originated the manufacture of Parian in 1845—a point that was disputed at the time by their friendly rivals, Mintons. Thomas Minton had been an engraver at the Spode Factory, but started in business for himself in 1788, making earthenware only until 1798, when the manufacture of china was commenced. This was abandoned in 1811 and again resumed in 1821. Under his successor, Herbert Minton, the revival of encaustic tiles was effected—the birth of an industry which has beautified the homes and palaces of the whole world. It is not too much to say that at the Minton Factory nearly every conceivable form of ceramics has been successfully produced. John Davenport, at Longport, late in the 18th century was making a china which perhaps has never been excelled in England, and which was made from the same formula for eighty years. Job Meigh was at the Old Hall Works, and Job Ridgway in 1794 built the works which were afterward to give us the beautiful china known as Cauldon. The Nantgarw and Swansea works had a brief existence (1813-1817), but left their impress in an unmistakable manner. John Doulton, in 1818, established his stoneware works at Lambeth, which later were to give us the beautiful creations of Tinworth—works for which the power employed was one blind horse, and which is now represented by 3,500 horse-power. Enoch Wood, Clews, Joseph Stubbs, Clementson, Joseph Mayer, Riley, Rogers and Adams are but a few of the names of Staffordshire potters who helped to build up the district and make it such a center that the five towns it comprises should come to be known under one name, "The Potteries." The first quarter of the present century saw the manufacture of earthenware printed in a

LAMBETH FAIENCE VASE.

MINTON VASE. PAINTED BY SOLON.

deep rich blue with views of American scenery, portraits of her patriots and heroes, and scenes in her history. A depth and beauty of color was obtained which potters to-day fail to approach, and specimens of which are becoming more rare every year. (See Historical Earthenware.) Some of the most noted manufacturers of these plates were Rogers, Enoch Wood, Clews, and Ridgway. For the same market vast quantites of white granite were made, manufacturers generally confining themselves exclusively to the production of white ware. The principal ones were Meakins, Edwards, Boote, Bridgwood, George Jones, Furnivals, Maddocks, Alcocks, Burgess & Goddard and others, Johnson Brothers and W. H. Grindley coming into the market later. With the exception of Burgess and Goddard, these firms are all in business to-day, and to meet modern requirements have added decorated goods, mostly in prints and "filled in," to their productions. In 1877 Doultons established works at Burslem for the manufacture of china and earthenware, and have proved formidable competitors to the leading firms in the district. In 1863 the Belleek Works were started, giving a name to the pearly lustered china which Mr. W. H. Goss had previously produced at Stoke under the patent of the inventor, Brianchon. In 1877 the old Derby China Works were revived by Edward Phillips and William Litherland. At Burmantofts, near Leeds, an impetus was given to correct form and coloring in the matter of large ornamental pieces beautified by rich and harmonious glazes. All over the country the local clays are utilized and potteries exist. Devonshire has half a dozen factories producing terra-cotta goods, skilfully glazed and colored or relying for effect on the beautiful tone of the clay. Burton-upon-Trent and neighborhood has thirty or forty, varying in their productions from common yellow ware to the highest forms of ornamental art. All through Derbyshire, Yorkshire and the Scotch borderland potteries abound, while Scotland has a full representation in Glasgow, Edinburgh, Kirkcaldy, etc. Wales has potteries at Mold, Pontypridd, Ruabon, etc.; Ireland, at Belleek, Coalisland, Moy, (County Tyrone), etc. It is difficult to estimate the number of potteries in England, but there are probably considerably over 1,500. I have myself a list of over 300 Staffordshire firms—it is claimed that there are this number in Longton alone—and over 500 others scattered over the United Kingdom. Some of these factories give employment to between 1,000 and 2,000 hands. It is a curious fact that notwithstanding the enormous aggregation of capital, the employment of such an immense force of skilled labor, recruited from all the pottery-producing centers of the world, but little abso-

lutely new has been discovered in ceramics during the present century. And this is the more of a surprise when we consider that for the most part the "rule-of-thumb" of our forefathers is a thing of the past, and that scientific principles guide the potter of to-day, from the analysis of the clay to the "cones" which indicate the degree of heat obtained in firing the ovens and kilns. But if we have no added precious secret, the qualities of the wares have steadily advanced, decorations have been more suitable to the body to which they are applied, and the misapplied designs characteristic of English pottery made during the first half of last century are happily a thing of the past. The craftsman has never been adequately recognized in the important part he has taken in this great industry, though the awarding of certificates at the various exhibitions has forced some recognition of him. The artisan, craftsman or artist who makes a departure or a step in advance is as much entitled to recognition as the manufacturer who invests his capital to provide him with his weekly wage.

ENGOBE, ENGOBAGE. The process of decorating by colored engobes or engobages consists in applying a thin layer of clay upon another of a different color which by its opaqueness hides the tone of that beneath. A design being traced on the object, the engobe is carefully removed about its outline, showing the ground beneath in sharp contrast. All sorts of subjects are adapted to this style of decoration. Sometimes the engobe is darker than the clay beneath, but usually it is lighter in color. When the design is finished the piece is covered with a transparent lead glaze. This process of engobe has been used a little everywhere since the fifteenth century, but especially in Italy and the south of France.

EPERNAY, Marne. In the first half of the seventeenth century a manufactory was founded here, where pottery glazed in brown was produced. Earthen dishes or pots with covers were decorated in half-relief on the lids with a hare, a fowl, fleur-de-lis, etc. In the Cluny Museum there is a specimen marked "Jean Montigny, à Epernay, 1716, le 16 Decembre." In the Museum at Sèvres another is marked on the cover in relief "Epernay." Still another both on the body and cover is signed "F. Dufiez."

EPINAL. In 1760 François Vautrin founded in this city a manufactory of faïences under the protection of King Stanislaus. Later, under the direction of the brothers Bon, who succeeded Vautrin in 1766, fine faïences were produced, sometimes marked with a stamp, "Epinal."

EPIS DE FAITAGE. On the gable ends, top ridge, dormer win-

dows, etc., of castles, houses and farmhouses, ornaments in glazed or enameled clay were much in vogue in the sixteenth century. These ornaments were designated as "epis de faitages" (literally, ridge spikes), and in the last half of the sixteenth century were principally made at Lisieux Manerk, Bonnebault and Pre d'Auge. They consisted of tubes of enameled clay, decorated in a variety of ways, and connected to form a continuous decoration by an iron rod passed through them and fastened to the ridge of the roof they ornamented. The manufacture of "epis" was carried on in Normandy in several potteries, as well as in Brittany and Champagne. The Museum of Troyes among others has several specimens that are traced back to the fourteenth and fifteenth centuries.

EPRON. A potter of Tours, 1797.

ESCALLIER, Mme. An artist employed by Deck, Paris.

ESTE, ISABELLA D'. (See Ferrara.)

ESTIÉ, E., & Co., Gouda, South Holland. Ornamental goods, usually decorated with a combination of ornament and either typical Dutch heads or landscapes, very soft and harmonious in coloring. They have also produced a number of ornamental pieces in faïence evidently inspired both as to shape and decoration by the Rosenburg china, and which can be hardly considered as successful as their other productions. The mark is roughly painted and usually accompanied by the initials of the artist. M 86.

ETOILE, L' (The Star). This was the sign of a manufactory of faïence founded in 1690 by Theodorus Witsenburgh; the products, which were of careful execution, and some of them, especially the plaques with borders in relief forming frames, may be classed among the most beautiful specimens of Delft ceramics. In 1705 the manufactory passed into the hands of Damis Hofdeck, a master potter of Delft, who marked H.

ETRURIA. The site of the Wedgwood factory, situated on the Trent and Mersey Canal, midway between Burslem and Stoke-upon-Trent. The Burslem manufactory was removed there partially in 1769 and wholly in 1771. Many parts of the old works still remain exactly in the same condition as they were in Wedgwood's time.

ETRURIA at a period anterior to the foundation of Rome comprised nearly the whole of Italy. It was divided into twelve sovereign cities, or cantons, among which were Tarquininii, the cradle of the royal family of the Tarquins, who at one time wielded the scepter of Rome; Veii, the greatest and most powerful city, which had 10,000 inhabitants and carried on seven wars with Rome; and Aretium, the birthplace of Mæcenas. The question where the Etruscans came

from has never been satisfactorily settled, and was debated many years before the Christian era. Their decline was in an inverse ratio to the rise of Rome. They became centered in Tuscany, and became extinct about 200 B. C. Etruscan fictile art is contemporary with, if it did not anticipate, that of Greece. "Before it profited by Greek example it was heavy and exaggerated in design, with an unwitting leaning to the grotesque; often coarse, but expressive and sincere. Ignoring the principles of Greek selection and idealism, it looked more to common nature for inspiration, striving to make it look exactly as it was, and not as it should be according to the law of æsthetics. Nevertheless it possessed a lofty creative faculty which at times raised its feeling to the sublime. This supernal, mystical element came to it from the Oriental blood of the race. Homer inspires alike Grecian and Etruscan art, but radical differences in treatment and execution of the same motive are often evinced."—*Jarves's "Art Thoughts."* "Some people continue to speak of the red-figured and black-figured wares as Etruscan vases, because of the many examples found in Etruscan tombs, but we now know that they were all imported from Greece or Grecian colonies. The so-called bucchero ware, made of black clay without colored decoration, which is found abundantly in Etruscan cemeteries, is the only branch of ceramics in which the Etruscans attained any individuality. This ware is now admitted to be their own invention. The forms were sometimes copied from Greek examples, but more often from metal vases imported from Egypt, Carthage, or Phœnicia. Repoussé ornaments were copied in stamps or molds, and, as before indicated, there were no painted decorations. These are the only Etruscan-made vases."—*H. E. Evrett, Pennsylvania University, in "Progress."*

F

FABRIANO, Italy. That there was a botega or individual furnace at this place is evidenced by the discovery in recent years of a fine piece of work bearing the artist's monogram, the date 1527 and the name of the place where it was painted—Fabriano. It is a plate, cleverly painted, having for subject the "Madonna della Scala," after Marc Antonio's engraving from Raffaelle, with the date, etc., given above on the reverse. It brought £114 at a sale at Christie's, where another piece with the same subject, but without signature, was also sold. In the Museum of Economic Geology is a plate from the same botega having for subject the rape of Proserpine, surrounding

a cupid center. The signature is identical with that on the "Madonna" plate, proving it to have come from the same hand. It was at first ascribed to Urbino, it not then being known that Fabriano possessed a fabrique.

FABRIQUE. An Italian word used to convey the idea of the private establishment of a master potter of the day, combining yet modifying both factory and studio.

FAENZA. The probability of the name of this city having furnished the term "faïence" has already been discussed. The first published reference to the wares of Faenza is a passage by Garzoni in the *Piazza Universale,* published in 1845, in which he speaks of the

SCUDELLA OR SWEETMEAT DISH OF FAENZA.

pottery of the place as being very white and polished. The Church of St. Petronio, at Bologna, has a pavement of tiles made at Faenza and dated 1487. There is in the Hotel Cluny a plaque dated 1475, which is the earliest known piece. One of the most important establishments of Faenza was known as Casa Pirota, but nothing is known of the date of its foundation or of the name of its maestro. The pieces were usually marked with a cross in a circle or the name of

the fabrique, and are works of the highest quality of enameled pottery, and of admirable decoration and artistic painting; wide borders ornamented with grotesques which were left white and tinted, on a dark blue ground. The works of three clever artists are traceable to this fabrique, although their names are not known. One is known among amateurs as the "green man," from the free use he made of this color. Faenza from an early period produced a large number of electuary pots and pharmacy bottles, generally decorated in the style known as *a quartiere,* being divided into compartments, painted in bright yellow, etc., on dark blue, usually having a medallion with a profile head or subject on one side, under which the name of the drug, in Gothic lettering, is inscribed on a ribbon. Late in the sixteenth century, when subject paintings covering the whole of the surface was in vogue, the unsigned works produced at Faenza are difficult to distinguish. There is an example in the Louvre dated 1561, with the subject of a cavalry skirmish, inscribed "In Faenca." Of the pottery produced at Faenza during the seventeenth and eighteenth centuries there is but little record. M. Jacquemart mentions some pharmacy jars dated 1616 which he ascribes to Faenza. In 1639 Francesco Vicchij was the proprietor of the most important fabrique. A modern establishment professes to occupy the premises of the Casa Pirota, producing reproductions of the old botega. M 87.

FAIENCE. This term is indiscriminately applied to all kinds of earthenware. It would, perhaps, be better to restrict its use to earthenware covered with a stanniferous enamel. The word is probably derived from Faenza, one of the early Italian potteries. As the Italians carried the art to France, it is possible it was there first spoken of as Faenza ware, which gradually was softened to faïence; or it may have been derived from a town in Provence called "Faiance," or "Fayence," a few miles from Cannes, where potteries are stated to have existed from an early period.

FAIENCE D'OIRON. Frequently these unique specimens of the potter's art are alluded to as Henri Deux ware, from the frequent occurrence of that monarch's cipher forming a component part of the decoration. Mr. Chaffers would call it "Saint-Porchaire," on the assumption that it was made there. There seems to be incontrovertible evidence that it was made between the years 1524 and 1537 at the Château d'Oiron, in the Province of Thouars, France, under the direction of an accomplished lady named Helene de Hangest. She must also have had considerable wealth, for the pieces appear to have been made solely for presentation purposes. Much of the work was done by her librarian, Jehan Bernart, and associated with

him was François Cherpentier, and the honors seem to be divided between these three. Fifty-three pieces are said to be in existence, of which eleven are in the Louvre, five in the South Kensington Museum, and the remainder in the hands of private collectors—mostly the Rothschilds. This rarity and their intrinsic value have made them extremely valuable, and many of them are valued at much more than their weight in gold. The fifty-three pieces are valued at $140,000. The forms are in most cases very elaborate, and consist of ewers, tazzas, salt-cellars, plates, etc. The ware is a fine white clay, to which a delicate tint is given by a very slight tinge of yellow in the glaze. The patterns, which are very intricate and seem to have been suggested by the highly ornate book-covers of the period, of which, doubtless, the library of the château furnished many examples, were first incised or impressed in the clay, and then these sunk portions were filled up with different colored clays in yellow, buff and brown. As all these clays had to shrink during the firing in exactly the same proportion, the difficulties attending the manufacture can readily be estimated. It is this triumph of potting at a time when the art in France could scarcely be said to exist that gives them their

FAIENCE D'OIRON.

special value. After the death of Helene de Hengest, in 1537, the manufacture was carried on under the direction of her son; but the artistic spirit of his mother was wanting, and after the death of Cherpentier and Bernart the manufacture fell into inexperienced hands, was neglected, decayed, and soon disappeared altogether. Mintons produced some excellent copies of this ware, executed by the late Charles Toft, a craftsman of surprising ability, and though they have only a comparative value the few remaining specimens are so highly valued by the firm that they are not now for sale. At Parthenay, near Poitiers, there is now a small factory devoted to the manufacture of goods in the Oiron style which are said to be of much excellence, but no specimens have come under our notice.

FAIENCE D'OIRON.

FAIENCE MANUFACTURING COMPANY, Greenpoint, L. I. Founded in 1880. In 1884 Mr. Edward Lycett, a capable potter and decorator, joined the company, and under his able administration much progress was made. He introduced a fine body very nearly approaching china, and in this ware produced many finely painted vases. He also succeeded in reproducing the fine metallic lusters of Spain and Italy, which at that time were despaired of by European potters. It is a fact worthy of mention that the Mexican Indians have long produced these *reflets metalliques,* though in the course of years the luster fades from exposure to the light. Mr. Lycett severed his connection with the Faience Manufacuring Company in 1890, and two years afterward the works were closed. M 88.

FAIENCERIE BORDELAISE. (See Bordeaux.)

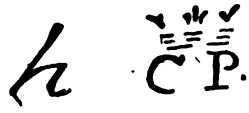
FALCONER, JOHN M. An artist employed at the Greenpoint Porcelain Works, Brooklyn, N. Y.

FALCONET. A French Academician and sculptor to the King, who had charge of the modeling department at Sèvres from 1753. His best known works are "The Bather" and "Les Amours."

FARINA, ACHILLE, Faenza. He was awarded the gold medal at

Turin in 1884, his exhibit being excellent both in composition and form, and some of the specimens most beautiful in color.

FAUBOURG ST. LAZARE (subsequently Faubourg St. Denis). A manufactory was founded here toward 1772 by Pierre Hannory, the productions resembling those of Frankenthal, where Hannory had been employed under his father. Later the products became more French in style, and were as a rule very carefully decorated. The porcelain of the first period is marked with Hannory's initial (A), which was afterward replaced by a prince's crown and the initials of Comte d'Artois (B), who became its patron.



A B

FAULTS OF ENGLISH PORCELAIN. Professor A. H. Church says: "The decoration of old English porcelain is often bad from want of power and knowledge in the decorator, often from want of feeling, and often from want of training in the sound principles of ornamentation. From one or other of these defects arise bad quality of color and inharmonious arrangements of colors, debasement or misapplication of forms originally good and appropriate, extravagant decoration, especially in the way of over-much gilding, by which attention is distracted from the more important decorative motif of the pieces; hard and mechanical handling of the brush, and mathematical exactness of form."

FAUQUEZ, Pierre Joseph, Pierre François Joseph, and Jean-Batiste Joseph. (See St. Amand.)

FAUQUEZ OF VALENCIENNES. (See Valenciennes.)

FEBURIER (or Febvrier), JACQUES. A potter at Tournay who in 1696 founded at Lille, in company with Jean Bossu of Gaud, a manufactory of faïence "in the style of Holland." Feburier died in 1729, leaving his factory to his widow and his son-in-law, Francis Boussemaert. Two small portable altars, one in the Museum of Sèvres, the other in the collection at Liesville, bear the following inscription: "Fecit Jacobus Feburier, Insulus in Flandria, Anno 1716." (See Lille.)

FELL & Co., Newcastle-on-Tyne. Founded in 1817. This is one of the North of England potteries, of which there remained about twenty-five on the Tyne, the Wear and the Tees about thirty years ago. Many of them were founded the latter part of the eighteenth century. The ware was inferior to that of Leeds, but some well-modeled statuettes were produced, often spoiled by poor coloring and crude attempts at marbling the bases. A coarse kind of purple

gold luster was often smeared over printed patterns. Fell & Co. used an anchor and the letter F as a mark and also the impressed stamps "Fell" and "Fell & Co."

FENTON. (See United States Pottery, Bennington.)

FENTON. A town comprised in the Staffordshire Potteries. It lies immediately to the east of Stoke-upon-Trent, and has a population of about 20,000. There are numerous manufactories, both of china and earthenware, and also of stilts and spurs.

FELDSPAR (Felspath, Felspar, of Feldspath). One of the essential constituents of granite. This is employed alone or in admixture with other substances in glazing hard porcelain, and in preparation of the body of Parian. Feldspar, used in a porcelain body, exercises a powerful influence upon clays in rendering them translucent. The feldspar generally used in pottery is potash feldspar, called mineralogists' orthoclase.

FERRARA, Italy. Alfonso I., Duke of Ferrara, established a fabrique of majolica at his castle in the fifteenth century. In the archives of Mantua is a document dated 1494, stating that Isabella d'Este, wife of the Marquis Gonzaga, of Mantua, sent a plate that had been broken in three pieces to Ferrara to be repaired by the maestro working at the castle; this was done, and the mended plate returned, with another as a gift, by the Duchess of Ferrara. Unfortunately, there is no authentic specimen of the earliest productions of this interesting fabrique, which was maintained simply from a princely love of art, the products being solely for private use, or as gifts to friends, during the régime of Alfonso I. and Alfonso II. The artists were doubtless Faentine, and the products of Ferrara are probably classed among those of Faenza, with which they must have a close resemblance.

FERNAND. A painter of Moustiers (which see).

FERRO, JEHAN. A potter from Montferrat. Made white ware at Nantes 1588.

FERRYBRIDGE. About four miles from Pontefract, Yorkshire. A pottery was established here in 1792 by Messrs. Tomlinson & Co. Four years later Ralph Wedgwood, a cousin of Josiah Wedgwood, joined the firm, and the style was changed to Wedgwood & Co. This mark was impressed on the ware, sometimes with the addition of the name of the place. Earthenware of an ordinary quality was made. Some figures and groups bearing this mark show excellent modeling, notably two cupids struggling for a bundle of arrows. At the present time there are three manufactories here—Brown & Sefton, Horn Brothers and Poulson Brothers.

FESCHI (Ferchi, or Terchi), BARTHOLOMEO. An artist and sometime conductor of the San Quirico Fabrique. With other members of his family he seems to have worked at various potteries throughout Italy, numerous examples on which his or their signature appear being known; but as they are accompanied only by the patronymic "Romano," it is difficult to assign them to any of the fabriques where they are known to have worked. (About 1714.)

FEUILLET, Paris. He uses as a trademark the interlaced L of Sèvres, enclosing the letter F, and produces many superbly decorated vases, plates, etc.

FICTOOR, LONGWYS. Master potter established at Delft in 1689. (See Eenhorn.)

FIEGEL, F. G., was a director at Arnstadt, Gotha, in 1775.

FIFIELD, WILLIAM. A flower painter at the Water Lane Pottery, Bristol. He achieved considerable reputation, his style being half naturalistic and half conventional. He was born in 1777 and died in 1857. Small barrels with colored hoops and a band of flowers bear his name or initials, the earliest being dated 1819.

FIGULINE. This word is to-day used only in ceramic language in France to qualify a special kind of clay used in the composition of common faïence, terra-cotta, bricks, and in general of all pottery that does not require a high temperature in burning. The word "figulus" was applied to the most ordinary worker in clay in the fifteenth century, but the term "figuline" seems to have been in use only during the term of Palissy, who, in a receipt dated February 1, 1565, styles himself "Architect and inventor of figuline grottos for the kings of France." These grottos were quite elaborately furnished, and were richly decorated with sculptured and enameled work in the ornate style of Palissy. The title of "Inventeur des rustiques figulines du roy" was bestowed on Palissy by Catherine de Medici at the instance of the Constable de Montmorency, who knew that the only way to save the artist from death on the charge of heresy was to have him numbered among those of the royal household. (See Palissy.)

FISCHER & MEIG. (See Pirkenhammer.)

FISCHER, MORIZ. (See Herend.)

FISCHER, NAUMAN & Co., Ilmenau. Principally figures. Established 1860.

FLANDERS. There were a number of places in Flanders, among them St. Amand, Lille, Dunkirk, Valenciennes, etc., where faïence was produced that closely resembled Delft ware, with which it came into competition. The stoneware commonly called Grès de Flandres is really of German origin. Flanders never possessed a manufactory

of stoneware. All kinds of stoneware were made at Raeren, which belonged to Limbourg, consequently to the Low Country (Pays-Bas), that was known to outsiders under the general name of Flanders, which probably gave rise to the term "Grès de Flandres." Besides, nowhere else in Europe are there to be found such quantities of stoneware in use and in collections as in Flanders. Belgium in the seventeenth century had stoneware manufactories at Bouffioux, Chatelet and at Pont-de-Loup, but these places formed part of the country of Wallon, and their productions should properly be termed Grès Wallons. Professor Church says these wares bore in many instances the designs of Flemish artists and the arms of Flemish families. He also states that glazed stoneware was made at Namur about the middle of the seventeenth century. Mr. Charles F. Binns, in "The Story of the Potter," says: "For a long period this ware was known by the convenient title of 'Grès de Flandres,' a name which has been shown to be incorrect as related to the modern map; but there are two good reasons for its adoption—first, that the centers of production were in former times included in the Low Countries, and, second, that almost the whole exportation of these wares was from Flemish ports." This latter inference I believe I was the first to exploit in "Rough Notes on Pottery." It is perhaps well to state that Flanders was a territory lying adjacent to the North Sea, between the Scheldt and the Somme, which embraced the present Belgium provinces of East and West Flanders, the southern portion of Zealand in Holland, and the greater part of ancient Artois in France, which almost corresponds with the modern department of Pas-de-Calais.

FLASHED GLAZE. A dexterous manipulation of glazes perfected by the Chinese, such as blues splashed over with spots of red and lilac, at first sight appearing to be the result of accident, but really the result of careful manipulation.

FLAXMAN, JOHN. The designs of this talented artist did much to make the fame of Wedgwood. He had been regarded as the greatest sculptor whom England has produced. He was born July 6, 1755, and was the son of a plaster-of-Paris cast maker of New Street, Covent Garden, London. The boy was weakly and slightly deformed from his birth. He early developed a talent for drawing and an inordinate passion for study, and found material assistance from the Rev. Mr. Matthews, a man of fine taste and artistic perception. At ten years of age young Flaxman's strength had so far improved that he was able to discard the crutches he had hitherto been obliged to use. He had already begun to draw and model, inspired by the

poetry of Homer, and at eleven years old and again at thirteen he won prizes from the Society of Arts for his models of figures in clay. At fifteen he exhibited models at the Royal Academy, then in the second year of its existence. The same year (1770) he entered as an academy student and won the silver medal. His commissions were numerous, and in 1775 he came in contact with Bentley, Wedgwood's partner, who at once proceeded to order some works from him. The first was a model for a chimney-piece, two vases, one with a satyr, the other with a triton handle; four bas-reliefs of the seasons; models of Jupiter, Juno, Minerva, Apollo and others; two cups and saucers, an antique vase sculptured with figures, and two statues, for the whole of which he received the magnificent sum of £12 18s. (about

A FLAXMAN DESIGN.

$64). From this time Flaxman continued to supply Wedgwood with models—designs so finely conceived and beautifully executed that Wedgwood was loath to part with them. Of a very fine Medusa he wrote to Bentley, "It is too fine to sell"; and again, speaking of a Cleopatra, "It really hurts me to think of parting with these gems." Flaxman continued to exhibit at the Royal Academy and to make drawings and designs from the poets., etc., leading a quiet, simple life in the home of his father. In 1781 he hired a small house and studio in Wardour Street, and there he brought home his young wife, Ann Denham. Sir Joshua Reynolds consoled him by telling him he had ruined himself for an artist and could not go to Rome to study. But he had found an educated, intelligent helpmate who was determined not to stand in his way, and Flaxman's industry and able management were such that in 1787 he was able to set out to Rome, accompanied by his wife. Here he continued to supply Wedgwood with

models, and was honored by an express visit from the great sculptor Canova, who journeyed from Venice for that purpose. Flaxman returned to England in 1791. It may be mentioned that in 1788, at the sale of Dr. Sitson's collection, the "Apotheosis of Homer," designed by Flaxman, sold for the large sum of £735 (about $3,765). Produced in 1779, it quickly proved the truth of Wedgwood's assertion that his ornamental works only required time and scarcity to make them worth anything. Flaxman was a man of simple and unassuming manners, of extreme gentleness, abstemious in his tastes and of devout spirit. He was a follower of Swedenborg. As an artist he ranks high among English sculptors on account of his inventive power and facility, and of the purity, grace and sweetness of his style. "Never," says one of his biographers, "has the beauty of Greek sculpture found a more perfect embodiment and reutterance in modern work. Occasionally, however, his productions are wanting in force and strength, and he was unequal to the suggestion of strenuous motion or to the portrayal of the intense passions. He was more skilful as a modeler than as a sculptor in marble, and more successful in bas-reliefs than in his treatment of the round." He died December 7, 1826.

FLEMISH STONEWARE. (See Flanders.)

FLEUR-DE-LYS. The mark of the fleur-de-lys is found on faïence attributed to the manufacturer Savy, of Marseilles, who adopted this mark after a visit made to his establishment in 1777 by M. Comte de Provence (No. 3). It is occasionally found on quite ordinary faïence of Rouen, but there is no possibility of confusion in the pieces thus marked, because the first are decorated on the enamel and the latter underglaze. Some rare pieces of Lille, most carefully decorated, also have the fleur-de-lys accompanied by a letter and a number. It was used at Capo di Monte in two forms (Nos. 1 and 2), and to-day is one of the marks of C. Tielch (No. 4).

1 2 3 4

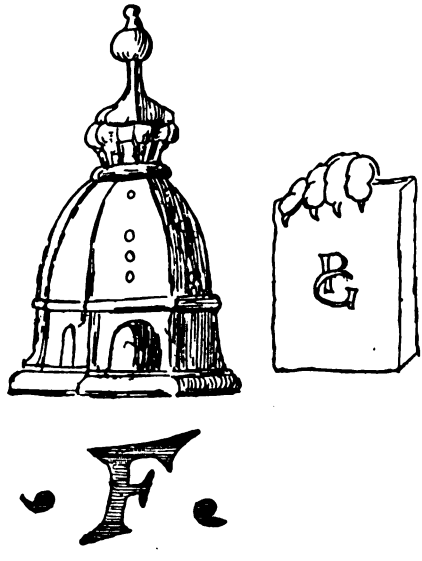
FLIGHT, T. The London agent of the Worcester Porcelain Works, to whom they were disposed of in 1783. (See Worcester.)

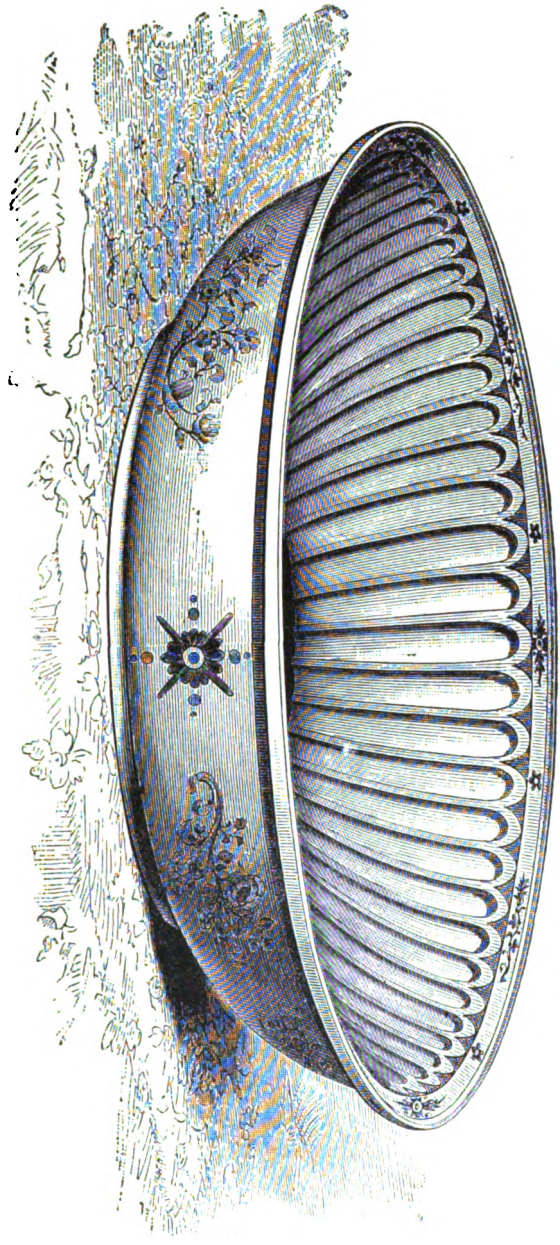
FLIGHT & BARR, 1840. (See Worcester.)

FLINT. Flint was first used in pottery by Dwight, of Fulham, in 1698, but it was rediscovered and then came into general use by

Astbury about twenty years later. It takes the place of the natural sand removed from the clay, and imparts to the ware strength and solidity. Without its aid clay of itself would warp in the firing. Flint is also used as a bedding or support for porcelain during the firing.

FLORENCE, Italy. In the sixteenth century endeavors were made throughout Europe to produce porcelain similar in kind to that imported from China, and, as naturally might be expected, that country was first in the field of discovery that had produced the finest enameled ware. Dr. Foresi, of Florence, has within recent years made the interesting discovery that under the patronage of the Grand Duke Francis I., about the year 1580, experiments were made at a private fabrique in the Boboli Gardens, resulting in the production of an artificial porcelain of close body and even glaze. Some of the first pieces were marked with an F and a dome (see cut). Further researches on the part of Dr. Foresi brought to light a piece of ware with the pellets of the Medici coat instead of the first mark. This led to a search of the records of that house, revealing the fact that ware was made in the duke's private fabrique, a manuscript in the Magliabecchian Library giving details of its composition and production. The marks clearly indicated whatever information was lacking. The Medici arms and the initials F. M. M. E. D. II., reading "Franciscus Medici Magnus Etruriæ Dux Secundus," attach it to his reign, while the initial F and the dome of her magnificent cathedral clearly indicate Florence as the place of its production. In the Castellani collection is an exceptionally fine specimen of this ware. It is a shallow bowl in the center of which is the figure of St. Mark and the lion painted in blue. We give an illustration on opposite page of the bowl itself. For the painted center see "Decoration, First, on China." Under the lion's paw is a volume bearing the monogram "G. P.," which it has been suggested is that of Raffaelli's great pupil, Giulio Pippe





MEDICI BOWL.

detto Romano. The design is probably from the hand of that master, but its execution must have been by later able artists, since Giulio Romano died in 1546 and the Medici porcelain does not seem to have been perfected until about 1575 to 1580. The Medici manufactory, which was the first in Europe to produce porcelain, ceased to exist about 1587. It was under the directorship of Bernardo Buontalenti, who received great assistance from a Greek who had learned the secret of porcelain in China. The decorations were mostly in cobalt blue, and to secure greater whiteness the body was covered with a white enamel to which a rich pearly glaze was added. There are only about thirty known pieces, consisting of plates, flasks, ewers, vases, and pilgrim bottles. Florence is also renowned as the birthplace of the chief of the Della Robbia family, Luca, whose works, purely from a ceramic point of view, astonish us by the perfection of their technique. (See Della Robbia.) The usual faïence and majolica have been produced at Florence since the eighteenth century.

MEDICEAN PORCELAIN.

FLORENTINE POTTERY COMPANY, Chillicothe, Ohio. Established in 1901 for the manufacture of colored glaze jardinières.

FLORIDA. Clay resembling English ball clay is found here of great density, plasticity and pureness, and is largely used in the manufacture of American pottery.

FLORID STYLE. The so-called period succeeding the "fine style," or culmination of the Greek art, when a more minute attention to finish and a greater elaboration of dresses and accessories are shown.

FLOWER, JOSEPH. Bristol. Manufacturer of Delft. Was at No. 2 Quay in 1775. In 1777 he moved to No. 5 Corn Street. His ware is perhaps finer and thinner than that of R. Frank, but does not appear

to have been made in as large quantities. Authenticated examples of his make date from 1741. The decorations were similar to those of R. Frank. Tiles, plates, dishes, teapoys and punch-bowls were made. Approximate dates may be assigned to Bristol Delft by the forms of the pieces. Plates of the early period, say 1706-1735, resemble their Dutch prototypes, being without any flange beneath, and having either simple curved sides and a nearly flat bottom or a rather steep sloping ledge and then a small short curve. During the second period, 1735-1745, the outer ledge was nearly level, the circumference was frequently cut or lobed in six divisions, and a flange added underneath. About 1755 the final form was reached which is seen in the majority of the extant examples, and which closely resembles that now generally adopted for dinner plates. The bowl illustrated is of Bristol make, probably Flower's, and the inscription on it speaks of the tin used for the glaze as having been that of "John Udy, of Luxillion" (Luxulyan in Cornwall). This inscription reads:

BRISTOL DELFT.

"John Udy, of Luxillion, his tin was so fine
It glidered this punch bowl, and made it to shine.
Pray fill it with punch; let the tinners sit round;
They never will budge till the bottom they sound."

FLOWN WARE. A piece of ware is said to be "flown" when it splits in the kiln during or after firing. A crack arises from an accident; a flown piece from manufacturing defects.

FLOWN (or Flow) BLUE. Underglaze blues are made to "flow" during firing by introducing in the kiln a small quantity of "flow," consisting of a mixture of saltpeter, borax and lead, the heated fumes of which rising in the oven cause the color on the ware to flow, giving it a very soft and beautiful appearance. Some pieces have the underneath stained, which is caused by the color on the pieces beneath "jumping," as it is technically called.

FLYT. A potter of Delft, 1669.

FO, DOG OF. The Buddhic guardian of temples and altars. It is often employed by the Chinese as a handle to the cover of a vase, and occasionally does duty as an ornament, either alone or sporting with another of its species.

FOGO, C. C. A painter at the Worcester works the latter part of the eighteenth century.

FORASASSI, JEAN. An Italian commonly called Barbarino, who went to Rennes (Brittany), from Florence in 1748. The making of a large number of statuettes of the Virgin and some of the saints is attributed to him. These statuettes, while not works of art, yet showed some skill, and were placed in niches in the walls or fastened against the walls of houses, which they were supposed to protect from lightning. There are still many of them in Brittany and Vendee. They have a distinctly Italian character.

FORGED MARKS. A manufacturer or artist signing his work with his name or some adopted sign establishes a trademark which is to the goods he manufactures or paints a guarantee and admission that they are from his hand, and it is of the same importance as his signature to a document. When, therefore, the Chinese, reproducing some of their early successes, copied the original mark, these constituted forgeries, however innocent they may have been at the time of making anything but reproductions, because they did not bear any sign or date to show they were reproductions. So when Brongniart sold the stock of Sèvres pâte tendre and the decorations added the Sèvres decoration mark, although technically the pieces are genuine Sèvres they are none the less forgeries. There is a nice distinction to be drawn between forged and merely imitative marks—a distinction each man must make for himself. The early English potteries imitated both the Meissen and Japanese marks. Totally unlike each other in paste, was this a forgery or an imitation? William Baddeley, of Eastwood, near Hanley, made imitation Wedgwood ware and stamped it "Eastwood," but so contrived that the first syllable should be quite illegible, and it was easy for the uninitiated to suppose that the whole was intended for "Wedgwood." The Ginori factory reproduces Capo di Monte pieces from the original molds bearing the factory mark, although the factory has not been in existence since 1821. The Austrian shield, the trademark of the Royal Vienna factory, which was closed in 1856, is freely used to-day on pieces in the Vienna style. There is a manufacturer in Paris, whose name for obvious reasons we suppress, who reproduces early Worcester with the well-known square marks so exactly as to

deceive the most learned ceramist. Herend makes reproductions so cleverly that they have been accepted by national museums as genuine until the discovery, generally accidental, of his name impressed in the clay. Avisseau, of Tours, made imitations of Palissy so perfect that certain dealers begged him to abstain from adding his name, that they might sell them as genuine pieces. American manufacturers very extensively copied the English arms on white ware in imitation of English goods, and now copy the English registration mark. These examples might be easily multiplied—no country failing to find numerous instances—but the examples quoted will suffice, and amply show that a trademark in itself is of little value and must be taken in connection with the characteristic features of the ware itself; or, better still, be entirely ignored, relying entirely upon a sense of appreciation of beauty and artistic merit, or those salient features which have given a reputation to the productions of the manufacturer.

FORLI, Italy. In a document referred to by Passeri, and dated 1396, is a passage which speaks of John Pedrinus, "formerly of the potteries of Forli, and now an inhabitant of Pesaro." This is the first notice there is of a pottery being at Forli, and nothing very accurate is known of the ware until the latter part of the fifteenth and beginning of the sixteenth century, when it may with safety be concluded that the products were of a high order of excellence. In the South Kensington Museum there is a series of examples of Forli ware, one of the finest being a piece of an historical service made for Matthias Corvinus, King of Hungary, whose arms are emblazoned on the rim. There are pieces bearing the date 1513, 1555, and the latest 1564, all of which are signed. This latest piece, a basin in the Museum of Bologna, has a representation of the supper at which the feet of Jesus are washed by Mary Magdalene, and is signed by Leochadius Solobrinus 1564. Instead of being raised on a ground of the same color, but in lighter shade, as in Faenza, the arabesques of Forli stand out in light blue modeled in white on a darker background. The Forli artists seem to have had a special fondness for blue, which predominates in all their work. The ware is usually marked with the name Forli in a cartouch (Fata in Forli), or with the letters "G I" inscribed on a stone, a book, or in a cartouch.

FORNARINA. One of the best known, as it certainly is one of the best executed, examples of Caffaggiolo painted majolica is a plate showing a painter engaged painting the portraits of a nobleman and his lady, who are seated near. The personages are supposed to be Raffaelle and the Fornarina.

FORRESTER, THOMAS, & SONS, Longton, Staffordshire. Manufacturers of majolica and ornamental earthenware, who, by catering to the multitude, have, from a very humble beginning, built up quite an extensive business. M89.

FOANG-HOANG.

FOANG-HOANG. A motif in Chinese decorations. It was an immortal bird which only approached men to herald happy events. It was formerly the symbol of the Chinese emperors, but the dragon was afterwards substituted, and the foang-hoang became the emblem of the princesses. It has a carunculated head, its neck surrounded with silky feathers, and the tail of a pheasant and peacock.

PLATE BY ORAZIO.

FONTANO. The name of a family of gifted ceramic artists of the sixteenth century. The original name was Pellipario. Orazio was the greatest artist produced by the city of Urbino. He worked with his father up to the year 1565, when he set up a botega of his own. The first of the family was Nicola, who was alive in 1540. He had a son, Guido, who

in turn was father to Orazio, Camillo and another Nicola. Of the latter we know nothing except that he is mentioned in his father's wills, made in 1570 and 1576. Flamonio, the son of Nicola, continued the works and was a favorite of the Dukes Guidobaldo and Francesco Marie. Camillo had a son named Guido who died in 1605. Geronimo Fontano may have been of the same family, but his manner is of a somewhat later character. The illustration is of a plate by Orazio in the South Kensington Museum. M 90.

FONTENAY - LE - COMTE, Vendee. In the sixteenth century there was in this city a manufactory of glazed pottery in which the effort was made to imitate in relief faïence Palissy's rustic figulines, but the products are very crude and do not merit any further mention.

FONTENY, JACQUES DE. A Parisian poet, potter and enameler in the early part of the seventeenth century. Fonteny seems to have principally made plates full of fruit, modeled and enameled in the style used later at Nevers and other factories. L'Estoile, in his "Journal de Henri IV.," says: "Fonteny gave me for New Year's gift (January 5, 1607) a faïence dish of chestnuts of his manufacture that no one could tell from real chestnuts—so closely did they counterfeit nature." And again: "Fonteny, the lame, gave me this day (February 29, 1607) a plate of artificial pears burned in the furnace, and which are the best thing and the nearest approach to reality that one can see."

FONTENOY VASE.

FONTENOY VASE. A vase in Sèvres pâte tendre painted by Genset commemorative of the battle of Fontenoy.

FOUGERAY. About thirty-five years ago, when the renaissance

of faïence began, many of the old designs and models, unused for sixty-odd years, were brought to light again at Quimper, where faïence articles were made and decorated in the style of the last century with such perfection that some unscrupulous dealers, having purchased the later ware, sold a number of them to collectors as genuine "old Rouen." M. Fougeray, to prevent this as far as lay in his power, ordered all faïence made at Quimper, of which manufactory he was director, marked with the monogram HB (La Hubaudiere et Cie.). All faïence thus marked can be safely attributed to the manufactory in the Faubourg de Loc-Maria at Quimper. (See Quimper.)

FOUNDLING VASE.

FOULQUE, or FOUQUE, JOSEPH. A clever decorative artist who about 1743 entered into partnership with Pierre Clerissy, who two years later sold him his manufactory, in which no less than twenty-two painters were employed. This manufactory was and continued to be the foremost of its kind in Moustiers and the surrounding localities. (See Moustiers.)

FOUQUAY, or FOUQUERAY, NICHOLAS, succeeded Louis Poterat about 1740 at his Rouen manufactory. His most remarkable productions were large ornamental pieces, of which the four busts and stands representing the seasons, in the Louvre, are excellent examples. They are ornamented with polychrome flowers and designs in the richest rocaille style. They may be considered as among the best productions of the Norman ceramists of the eighteenth century.

FOUQUET, L. C. · A painter at Sèvres, Berlin, and later at Nymphenburg.

FOUNDLING VASE. One of the most important examples of old

Chelsea porcelain. It is about twenty-four inches high, with rococo scroll handles and medallions painted with beautifully executed figure subjects. It was presented to the Foundling Hospital in London by Dr. Garnier in 1763, but within a few years was purchased by the Earl of Dudley.

FOURMAINTREAUX, JULES; FOURMAINTREAUX, COURQUIN. There are two factories near Calais, both producing similar goods, mostly reproductions of Rouen ware. The forms are very varied, the decorations freely adapted from Norman wares, with some actual reproductions, the whole showing care in the manufacture. Both firms have a very considerable output. We have not seen any marked pieces.

FOURNIER. A Frenchman of this name established a pottery at Copenhagen about 1760, where porcelain was made. About 1772 either a new manufactory was started or Fournier's was revived by the Minister of Justice, Muller, assisted by Von Lang, a fugitive from Germany. In 1775 the Government took it in hand, and it is since known as the Royal Porcelain Works. (See Denmark.)

FRANCESCO DURANTINO, of Urbino. Nothing more is known of the artist than his signed works, and among these is a plate in the British Museum representing the meeting between Coriolanus and his mother, signed "Francesco Durantino, 1544," which has given rise to a doubt as to whether he ought to be classed among the potters of Urbino or as having a small establishment of his own at Bagnolo, or Bagnara, near Perugia. Careful and vigorous drawing, with delicate outlines and soft, rich color effects, is a characteristic of this artist's work.

FRANCESCO. A native of Pesaro, Italy, who towards the middle of the sixteenth century set up a faïence factory at Lyons, and which was afterward managed, under his direction, by Julien Gambin and Dominico Tardessir, both natives of Pesaro. It was not of long duration. The productions were faïence objects decorated with figures, similar to the majolica of Urbino and Faenza at the time of their decline. The drawing is heavy, nearly always encircled with a black line, sharply defined, and the coloring is dry and hard. Some of the pieces bear explanatory inscriptions written at the back in bad French.

FRANCESCO, MARIA, GRAND DUKE, who is by Lasri stated to have been a patron of Florentine majolica, having brought an artist to Florence to decorate vases. No majolica is known to have been made in Florence, and if there ever were any it has probably been ascribed to some other place.

FRANCESCO, VEZZI, founded in Venice early in the eighteenth

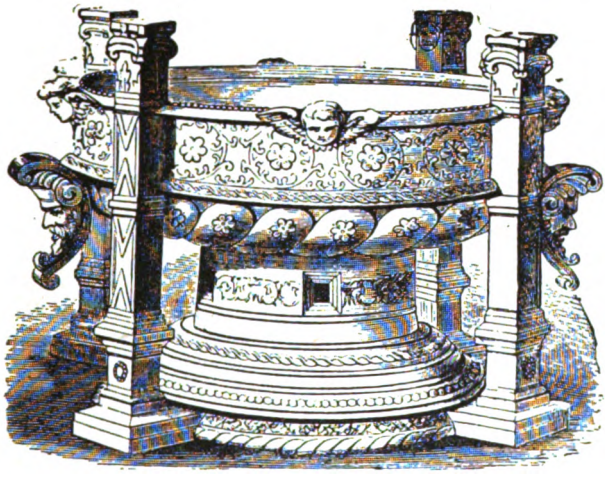
century a manufactory of porcelain to which many beautiful works are attributed.

FRANCESCO XANTO, or ZANTO. One of the most important artists of Urbino. He signed the most of his pieces in various ways—the earlier are generally more or less fully signed, while many of the later have only one or two initials. His full name, as indicated by his various signatures, seems to be Francesco Xanto Avelli da Rorigo, and the dates of his signed works extend from 1530 to 1542, though he probably left earlier and later pieces undated. Authorities differ as to the merit of his work, but that he was unquestionably an artist of talent is evidenced by some of the many specimens from his hand that may be seen in almost every collection, where his masterly composition especially marks him as one of the greater artists of the Renaissance. His designs are taken from classical and mythological subjects usually, and sometimes from Raffaelle. It is not known whether Xanto himself applied the brilliant lusters that were in such demand in his day, or if, as some suppose, he sent his works to the maestro Giorgio Andreoli, of Gubbio (see this name), master of the art of lustering, for this finishing touch. We give quotations from several ceramic authorities whose estimate of his ability seem to considerably vary: "Xanto's execution, although dexterous, is monotonous and mechanical; his scale of coloring is crude and positive, full of violent oppositions; the only merit, if merit it be, being that of a certain force and brightness of aspect; in every other respect his coloring is commonplace, not to say disagreeable, even; blue, crude, opaque yellow and orange tints and bright verdigris-green are the dominant hues, and are scattered over the pieces in full, unbroken masses, the yellow especially meeting the eye at the first glance."—*Robinson.* "Among them are examples of high artistic excellence, although many of them betray want of care and hasty execution."—*C. Drury E. Fortnum, F.S.A.* "Its highest glory came with Francesco Xanto, whose broad and generally true drawing and masterly composition mark him as one of the great artists of the Renaissance."—*Miss Young.* "His work is very variable in excellence; his drawing is somewhat mechanical, and coloring bright, but inharmonious; a vivid black and green are seen; his subjects for *istoriati* are adapted from groups in the composition of Raphael and other artists, but his subjects are original and show research."—*Beckwith.* M 91.

FRAGONARD. One of the artists who during the reign of Louis Philippe originated the pseudo-Renaissance style, all ornamental

pieces or porcelain being overloaded with sculptured relief in an artificial, formal manner.

FRANCE. Passing over the early history of French pottery, and merely noting that at Poitou, in the thirteenth century, green glaze conical urns were made, that Beauvais had reached celebrity through the manufacture of stoneware, and that Jehan de Voleur was at Hesdin, toward the close of the fourteenth century, acquainted with the use of stanniferous enamel, we find only unimportant and transient attempts at anything like sustained effort or one deserving of serious consideration until about 1524, when Helene de Hangest produced those wonderful specimens of ceramic skill which, under



FAIENCE D'OIRON SALT-CELLAR.

the names of Henri Deux and Faïence d'Oiron, have been alike the admiration and despair of the modern potter. Considering the early date of these productions, they are unrivaled triumphs, all the more remarkable in that they resembled nothing produced in any country before that period. (See Faïence d'Oiron.) Shortly after the middle of the same century Bernard Palissy succeeded in producing his incomparable enamel. Of Palissy and his wonderful struggles, his perseverance and ultimate triumph, we have written elsewhere. A few pounds of fuel made him famous; a few pounds less, and he would have been remembered only as a crazy enthusiast who sacrificed the lives of his children to a stubborn disposition which would not acknowledge defeat. The seventeenth century saw the establishment of a distinctively French school, all the more meritorious

because it owes its existence to Italian influence and Italian potters, as later the French earthenware trade came into existence with the aid of, or was created by, English potters. Looking back a little, we find that in 1542 a manufacture of enameled tiles was established at Rouen, in which Italian influence was plainly visible. Specimens of this manufacture decorated the Château d'Ecouen, built by the Constable de Montmorency. Francis I. summoned Italian workmen to Paris, among whom was Gerolamo della Robbia, a grand-nephew of Luca, who was entrusted with a considerable share of the decora-

PALISSY RUSTIC DISH.

tion of the Château de Madrid in the Bois du Boulogne, the outside of which was decorated entirely with terra-cotta, enameled earthenware and enamels. This building was nicknamed "Château de Faïence," and also "Immeuse vassalier." It was entirely destroyed by fire in 1792, and nothing was preserved except nine immense Limoges enamel plaques measuring 75 by 39 inches, the largest ones known. About the middle of the sixteenth century Francesco, a native of Pesaro, established a faïence works at Lyons, and was assisted by Julien Gambin and Dominico Tardessir, both of Faenza, About the same time both Nantes and Avignon had factories founded by Italians. At Nevers, Scipio Gambin was called there from Faenza by the Duke of Nivernais. The Conrade Brothers, the backbone of Nevers faïence, were from Savona, about 1608, and the Custodes, on whom rests what fame Nevers possesses, were also

from Savona. The bulk of the faïence produced there was of rude and coarse workmanship, and designs lacking originality. About the middle of the seventeenth century there was also a Custode at Rouen, and the influence of the art of Savona is plainly discernible; but under Louis Poterat, who in 1673 obtained a fresh privilege, a new and distinctive style was invented, comprehensively styled Rouennaise. Italian influence, under this distinctive Norman decoration, entirely disappeared; the art spread to Moustiers, Paris, Sincenny, Quimper, Lille, Strasburg, Luneville, Neiderwiller, Marseilles, etc. In the early years of its existence the decorations were applied on the unfired enamel—a very difficult process, but productive of very soft effects. Later the enamel was first fired, making possible the employment of fine lines and greater detail, but at some sacrifice of softness. The beginning of the eighteenth century saw an immense impetus given to the manufacture of faïence. The finances of France had been considerably drained by continuous wars, the inundation of the Loire, and the famine of 1709. The King, in order to continue the war, sent all his gold plate to the mint to be coined, and replaced in with faïence. The courteirs followed his example, and decorated faïence became the fashion. A period of prosperity for the potter followed and lasted until the middle of the eighteenth century, when owing to the growing production and popularity of porcelain, or later (1786) the decree admitting English earthenware at a very low duty (12½ per cent.), combined with political events, the manufacture began to decline, and had altogether disappeared at the close of the century. Under this new order many English potters went to France and established factories on the English systems, among which may be enumerated Montereau, Creil,

NEVERS VASE.

Longwy, Sarreguemines, Bordeaux and others. These manufactures were sufficiently good at first, but quickly became so mediocre and coarse as to be practically useless. Owing to the exertions of M. de St. Amans, assisted by the illustrious Brongniart, utter ruin was happily averted, and the manufacture was recommenced under infinitely better circumstances and with happier results. The factories mentioned, with the addition of Gien and Choisy le Roi, are now under the control of an association known as the "Comptoir Ceramique," an organization formed to regulate production and prices. The porcelain of France occupies an important position in ceramic history. As early as 1673 we find that "Le Sieur de St. Etienne," better known as Louis Poterat, had found the secret of making porcelain; and although a few pieces made by him are known, he either preferred to give his undivided attention to his faïence factory or could not produce porcelain at remunerative prices. However, the honor of making the first china in France clearly belongs to Poterat, and not to the Chicanneaus, of St. Cloud, as is generally understood. We have no precise information as to the exact date it was made there, but know that it was before 1700. M. Garnier gives the date as 1696, and this is probably approximately correct. The china made there was a fine, milky-white color, very transparent, and decorated in blue in the pure French style, or in colors from Oriental designs. The manufactory was destroyed by fire in 1773, and was not rebuilt. Lille, in 1711, came next, but the paste was less pure and the decorations inferior. Chantilly, founded in 1725, adopted the old patterns of the Japanese Imari ware, and beautiful effects were obtained by using a tin or opaque glaze, while in all other soft porcelains it is vitreous and translucent. Mennecy-Villeroy was founded in 1735, and continued until 1773, when it was united with Bourg-la-Reine. Sceaux and Arras (the latter as early as 1711) also produced china. The products, however, of all these factories did not equal that of Meissen, and Saxon china was largely used in France. In 1740 a vast industry, probably unequaled in its influence, was born at Vincennes. From a small beginning it soon obtained a considerable extension. The King and the Marquise de Pompadour took a lively interest in its welfare, and porcelain became the fashion. In 1753 the King took one-third of the shares and gave it his official patronage, the ware was marked with his monogram, and the available accommodation being insufficient, a new works was built at Sèvres in 1756, and continued there until 1882, when it was transferred to the new buildings in the park

at St. Cloud, close to the Rue de Sèvres. About 1760, so great was the success obtained that France had no longer need to go to Saxony for porcelain. The history of Sèvres (and that of other factories mentioned in this article) is told elsewhere; so there is no occasion to repeat it here. The discovery of kaolin in France in 1768, in the neighborhood of Limoges, led to the establishment there of several factories principally employed in making white ware for decoration. The advent of the Havilands about the middle of this century changed altogether the order of things, and Limoges is now the largest producer of finely decorated porcelains in France. While Sèvres has always stood preëminent, the discovery of kaolin was the cause of the establishment of numerous other factories—Clignancourt (1775), Neiderwiller, Marseilles, Lille, Valenciennes, Orleans, and several Paris factories among the number. More recent years have seen the inauguration of several important ceramic enterprises, those of Barbizet, Pull, and especially that of Theo Deck, of Paris, being the most important.

FRANCO, BATTISTA. A celebrated Italian painter who was called to Urbino in 1540 by Guidoboldo II. to make designs for various pieces. Many of them were reproduced by Orazio Fontano. He died in Venice in 1561.

FRANK, RICHARD, Bristol. Delft works were founded by him probably during the last quarter of the seventeenth century, behind the premises in Redcliffe Street known as Canynge's House. Numerous samples of Delft ware were found on this site in 1869. The body of Frank's ware is of a buff color, harder and denser than the body of similar Dutch wares. The tin enamel has a slightly greenish tint, but is uniform in texture and color. It was usually decorated in blue of a rather dull color, while occasionally a ground of powdered manganese purple with white medallions bearing designs in blue was used. The designs were copied or adapted from Chinese and Dutch patterns. He made tiles for fireplaces and dairies. His pottery was removed in 1777 to 9 Water Lane, and in 1784 was sold to Joseph Ring. (See Bristol.)

FRANZHEIM, CHARLES W., was born in the city of Wheeling, West Virginia, and was among the first to introduce the manufacture of pottery there. He, with others, incorporated the Wheeling Pottery Company in the fall of 1879, and assisted in building up this concern to its present extensive proportions with its diversified lines. When the project was first mooted the scheme was unhesitatingly condemned by the most experienced potter of the day, and in consequence several of the leading promoters withdrew from the

enterprise, but Mr. Franzheim's faith in the project never wavered, and in spite of many difficulties and owing entirely to his indomitable perseverance the enterprise was finally launched. In the fall of 1889 he left it to become the president and general manager of the Warwick China Company, and returned again to the Wheeling Pottery as its president and general manager in the spring of 1893, since which time he has been its active head, having full charge of all its varied departments. Mr. Franzheim is also president of the United States' Potters' Association, which office he has held since January, 1896. The geniality and personal magnetism of Mr. Franzheim have been potent factors in his successful career, and it is somewhat rare to find such qualities blended with a restless energy and determination of such force as to utilize every defeat and turn it to account to insure ultimate victory.

CHARLES W. FRANZHEIM.

FRANKE, A. Manufacturer of china, Vordamm, near Dresden. M92.

FRANKS, SIR A. W., F.R.S., F.S.A. An English authority on ceramics and author of "Japanese Pottery," one of the South Kensington handbooks, and other contributions to ceramic literature.

FRANKENTHAL, Germany. A manufactory was founded in this city about 1743 by Paul Hannong (see this name), when he was obliged to leave Strasburg. Both porcelain and faïence were made here, the latter so closely resembling that made at Strasburg by the Hannongs that it can with difficulty be told from it. All that, however, marked with the Hannong signature, accompanied by an F, is attributed to Frankenthal. M 93.

FRANKLIN PORCELAIN COMPANY, Franklin, Ohio. A pottery

was started here about 1880-1, but was only in operation about three years. Clay from Chattanooga was used, and in addition to hotel china an attempt was made to make bone china. The only piece we have seen is a small pitcher with a raised flower spray running from the handle, and not at all badly colored. Mr. Lawshe, formerly of Trenton, was the manager. Mark as shown in margin.

FRASNEY, PIERRE DE. A Nevers poet who published in the *Mercure de France,* in the year 1735, a poem on faïence, in which he comments on the fact that the faïence of Nevers was used all over France, and even exported to England. It seems a pity that such should have been the case, since the Italian influence had died out and given place to an exceedingly coarse style of decoration, representing for the most part gross and even licentious scenes, while the images of saints, where used, became mere grotesques. (See Nevers and Historical Pottery.)

FRATTA, LA. A small town lying between Citta di Castello and Gubbio in Italy. The process of decorating by outline on engobe, as used in Citta di Castello, was practiced here. Some of the pieces attributed to Costello are by several authors ascribed to La Fratta, but there seems to be no ground for this beyond the fact that the same style of decoration is in use there at the present time.

FREDERICK, SHENKLE, ALLEN & Co., potters, East Liverpool, Ohio, from 1881 to 1888.

FRECHEN, near Cologne. In the sixteenth century stoneware of yellowish paste, glazed in more or less dark brown, sometimes spotted with blue, was made both at Frechen and Raeren. Much of this ware was decorated with friezes in relief representing the chase, dancing, or subjects taken from the Old Testament. Some were ornamented with a mask with long beard (see Bellarmines) on the front of the neck of jug or vase. Mr. Schuermans, who has made a special study of stoneware, says that the distinguishing characteristic of Frechen products is that there is always an elliptic mark from the cord that separates the base of the ware from the wheel on which it is turned. The center of the parallel ellipses thus formed is never the real center of the piece itself, and on the products of almost all other manufactories is effaced. (See Raeren.)

FRENCH CHINA COMPANY, Sebring, Ohio. Manufacturers of earthenware who commenced production in 1898.

FROG MUGS. Mugs with models of frogs attached to the interior were made at Leeds and Newcastle-on-Tyne. The mug being full did not reveal its ugly denizen until part of the contents had been drunk.

FRUTTING, EMMANUEL-JEAN. In the latter half of the eighteenth century Frutting founded at Berne a manufactory of faïence where he made stoves decorated with tiles painted in superb colors and fired in a mouffle or decorated with figures and landscapes charmingly painted under the glaze. In the Gasnault collection in the Limoges Museum there is a small model of these stoves marked with the initials E. I. F., with the date 1772 beneath. The same marking is found on several other specimens that were till now considered doubtful.

FRYE, THOMAS. (See Bow.)

FRYTOM, FREDERICK VAN. Faïence painter. Established at Delft in 1658. He was an artist of exceptional talent, painting figures and landscape in camaieu blue with great skill and exactness. There is a magnificent landscape painted on a large plaque in the Nederlandsche Museum of La Hague that is signed F. V. Frytom.

FUJIKATA-MURA, Province of Ise, Japan. "In the time of the Emperor Yuraiku, A. D. 473, an official named Haji no-muraji was commanded to provide pottery for use at his dining-table. In evidence of the art having developed and spread throughout the country, it is recorded that the Emperor received offers for the supply of such vessels from different places; Kusasa-mura, Province of Settsu; Uji-mura and Fushimi-mura, in the Province of Yamishiro; Fujikata-mura, in the Province of Ise; and from the manufactories in the provinces of Tamba, Tajima, etc. Many of these places still maintain their old traditions. A kind of unglazed earthenware is made by the people of Kusasa-mura; and the ancient art is carried on at Uji, where Asaki-yaki is made, Fushima, Fuka Kusa and neighborhood, and also in the provinces of Tamba and Inaba. At Fujikata-mura pieces of this ancient pottery are occasionally dug up, confirming the locality of the factory."—*A. W. Franks.*

FUJINA WARE. This ware is also made at Matsuye, and is therefore often called Idsumo yaki. The factory was founded by Prince Fumai. The greater part of the ware is made of a soft but very tough clay, and covered with colored glazes. Sometimes a decoration under the glaze is applied. In later years a decoration in imitation of Satsuma ware was commenced, and is now carried on on an extensive scale.

FUKAMI SUMINOSUKE. A distinguished potter of Arita. (See Mikawaji ware.)

FUKAGAWA YEIZAYEMON. Another potter from Arita. There are about 150 houses in Arita engaged in porcelain making, employing some 1,560 workmen.

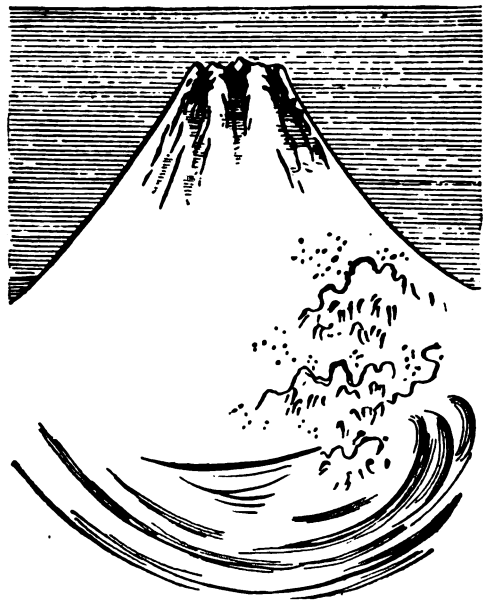
FUKAKUSA. (See Fujikata-mura.)

FUMAI, PRINCE. (See Fujina.)

FULHAM. (See Dwight.)

FUSIYAMA. Not on pottery alone, but throughout the entire range of Japanese art, there is one peculiar form introduced—that of a truncated cone with gently curving sides; this represents Fusiyama, an extinct volcano. It is held in highest admiration by the natives of the empire on account of its great beauty and religious associations. E. B. de Fonblanque, speaking of Fusiyama, says: "If there is one sentiment universal among all classes of Japan it is a deep and earnest reverence for their sacred mountain, Fusiyama—the temple, the grave, and the monument of the father of their faith. Two hundred centuries are supposed to have elapsed since, created in a single night by a convulsion of nature, Fusiyama reared its proud crest and challenged the worship and the love of the millions who from the extreme end of the island gazed with awe and devotion upon its snowy peak as it glittered for the first time in the morning sun or faded into the mist of evening. And this reverence has survived time and change, has grown with the growth and strengthened with the strength of the Japanese people. Fusiyama is their ideal of the beautiful in nature, and they are never weary of admiring, glorifying and reproducing it. It is painted, embossed, carved, lacquered and modeled on all their vases; men carry it in their pockets, women wear it on their persons, and children by the roadside build miniature Fusiyamas of mud, as our own make mud-pies. While all share in the admiration, it may be doubted whether they partake alike in the religious associations connected with Fusiyama, or in the perfect confidence with which the mass of people view it, not only as the shrine of their dearest gods, but the certain panacea for their worst evils, from impending bankruptcy or cutaneous diseases to unrequited love or ill-luck at play. The annual pilgrimage is accordingly performed by thousands upon thousands. If attended with beneficial results the gods are praised and Fusiyama is glorified; if otherwise, the pilgrim has the melancholy satisfaction of knowing that his own sins are at fault and need further expiation. Men of rank never take part in these pilgrimages, and women are only allowed to do so once in every sixty years." Fusiyama rises to between 14,000 and 15,000 feet above the level of the sea, and is distinctly visible from Tokio. It is the appearance it presents from that point which is most frequently depicted in native drawings. The Japanese, however, are not content with representing it from one point of view or as seen under one condition of the atmosphere, and

we find representations of the sacred mountain in sunshine and rain, intersected by clouds, or with its top disappearing in them. The top of the mountain is covered with perpetual snow, amidst which stands the temple of Fusiyama, the goal of all the native pilgrimages. Fonblanque describes it as a "modest, unpretending little hut adorned with a few gods in lava and some common tinsel ornaments. Here the devout lay their offerings upon the altar, and in return have their garments stamped with strange figures and devices in token of their having accomplished their pilgrimage. Great virtue is attributed to these stamps, particularly for the cure of cutaneous diseases, and their number is only limited by the size of the garment and the extent of the fee."



FUSIYAMA.

FULDA, in Hesse. A factory was established here by the Prince Bishop of Hesse in 1793. It produced very finely decorated vases, figures and services, all the decorations showing the work of able artists. Specimens are rare and highly prized. M 95.

FULVY, ORRY DE, brother of the Controller-General of Finance, in the year 1740 established a manufactory of porcelain, with the permission of the King, at the disused riding-school of the Château de Vincennes. After several years spent in costly and fruitless experiments, chiefly due to the lack of skill and bad conduct of the two brothers Dubois, at whose proposition the manufactory was originally started, Orry de Fulvy was so discouraged that, finding himself unable to refund 10,000 livres loaned by the King, he was about to abandon the undertaking, when a man by the name of Gravant, who had been employed by the Dubois brothers and assisted their experiments, proposed to continue the effort. Success

crowned their endeavors, and in 1745 they were able to show specimens of sufficient merit to secure the ultimate success of the manufactory. De Fulvy, under the patronage of his brother, now formed a company of shareholders, and the funds were greatly increased from year to year. In 1748 mention is first made of a specimen being produced that was sufficiently perfect to be presented to the Queen. This was a porcelain vase described by the Duc de Luynes in his "Mémoires" under date April 13, 1748, in which he speaks of it as a "vase of white fashioned porcelain, and accompanied by three small white figures; the whole is mounted on a gilt bronze pedestal. There is in the vase a bouquet of flowers made also of porcelain. M. de Fulvy told us there were four hundred and eighty flowers in the bouquet. The pedestal, vase and bouquet may be about three feet in height. The bronze mounting alone cost 100 louis (about £94) and the porcelain about as much; it is perfect work of its kind—as much for the whiteness as for the execution of the small figures and flowers. This manufactory is now, for the making of flowers, superior to those of Saxony." Another similar vase was sent by the Dauphine, Marie Josephe de Saxe, to her father, Frederick Augustus, King of Poland and Elector of Saxony, to show him that ware equal to that of Meissen was produced by her adopted country. These vases, like most of the porcelain originally manufactured at Vincennes, were white, and the decoration consisted chiefly in bouquets of flowers modeled and painted according to nature. Up to 1749 the expenses had been very heavy and there had been no income. The ceramists, of whom De Fulvy remained chief, became so elated by the high praise bestowed from all sides, and especially from the court, that they imagined they would reap an enormous revenue, in which hope they were disappointed. But the porcelain at Vincennes had made a reputation, and rival manufactories were started up and the most skilful workmen were offered bribes to leave Vincennes, and M. de Fulvy obtained a decree of the Royal Council which imposed a fine of 3,000 livres on "every manufactory who employed a workman who had left Vincennes," and also obtained an order to prevent strangers from visiting the factory. De Fulvy died in 1751, when the partnership was dissolved, in consequence of the necessity of dividing his shares and profits among his heirs.

FURNIVALS, LIMITED, Cobridge, Staffordshire. Thomas Furnival, Jr., & Co. succeeded Reuben Johnson & Co. at the Stafford Street Works, Hanley. The firm was changed to Furnival & Clark shortly afterward, and remained so until 1851, when the present

works at Cobridge were taken, and the style of the firm became Thomas Furnival & Sons. A few years ago the business was turned into a limited liability company, under the style of Furnivals, Limited. Messrs. Furnivals have confined their attention chiefly to staple products, and in toilet ware especially have achieved some notable successes. At one time their services, ground laid in brilliant colors, with the designs printed in luster, had an immense sale, and some of these have lately been revived. We give illustrations of two of these old patterns — the Grecian, the design of which was adapted from Grecian and Etruscan vases, and the Gothic, the latter being from a design of William Steele, the *motif* being furnished from the tracery of a window of a Broadway church. Their more recent successes in this line are on the market now, and their merits can be judged of from personal inspection. Messrs. Furnivals in recent years have steadily forged ahead, never content with the successes they have achieved, but earnestly striving to excel themselves; and the care taken in manufacture, and the artistic feeling displayed in the designs, particularly suited to the shapes on which they are employed, have placed them in the front rank of English manufacturers. By confining themselves directly to staple goods they are enabled to give that personal supervision to their products which when intelligently employed seems to be the surest road to success. Brief mention should be made of their punch-bowls, on which much skilful manipulation and harmony of decoration are apparent. M 96.

FURSTENBURG. A porcelain manufactory was established here in 1750 by Bengraf, from Hochst. It was under the patronage of the Duke of Brunswick. Porcelain is still manufactured there. M 97.

FURUTA ORIBE-NE-SHO SHIGEKATSU. Oribe ware was made at a factory in the Province of Owari in the beginning of the seventeenth century by or at the command of Furuta. Some of it was painted with a plum flower and latticed bars in dark brown, which design forms the coat-of-arms of the family of Furuta. The thick-

ness of the glaze was not uniform. At present tea utensils and other inferior articles are made there.

FUSHIMA-MURA. In the sixteenth century a potter named Koyemon commenced to make human figures with plastic clay, and they are still made in the neighborhood. They are made in clay molds, each part separately, then joined together and painted, but are not glazed. See also Fujikata-mura.

G

GAAL, JOHANNES. A faïence maker at Delft in 1707. Very few of his works are known, but these are all extremely remarkable and are signed I. G. or J. G. M. Harvard mentions a beautiful plaque of Gaal's that bears his name in full, together with the arms of his family.

GABRIELE, NICOLI DI. An Italian ceramic painter, about A. D. 1530.

GAGER, OLIVER A. Mr. Gager was born in Franklin, Conn., December 19, 1824. When about twenty years of age he went to sea, visiting various countries, and leading a life unusually eventful and interesting. In 1849 he visited California, the voyage from Fall River, Mass., to San Francisco occupying eight months. In 1855 he engaged with others in manufacturing pottery, and was for a while part owner and manager of the United States Pottery Company, Bennington, Vt. This proved unsatisfactory, and was the solitary failure in his business career. For a while after this he was located at Austin, Nev., as superintendent and manager of certain mining properties. On his return from the West he reentered the pottery business, and was in one form or another connected with this industry up to the time of his death. For a while he was with Morrison & Carr, of New York, and in 1868 became a partner in the house of George W. Bassett & Co. In 1871 he sold his interest in that firm, and became resident partner in the importing house of Charles Field Haviland & Co., of New York, Paris and Limoges. In 1882 he purchaser his partner's interest, and continued the business alone, in his own name, until 1886, when he associated with him Frederick Haviland and Frank P. Abbot under the firm name of O. A. Gager & Co. The firm thus organized continued until his death, October 20, 1889.

GALENA. A mineral which is essentially a sulphide of lead. It is of a leaden gray color with a metallic luster. Almost all the lead of commerce is obtained from it. Galena was used for glazing the

English slip ware, being unsparingly dusted on and liquefied by the firing, and on dark clays produced a most brilliant effect.

GALLE, EMILE, Nancy. (See Nancy.)

GALLOWAY & GRAFF, Philadelphia, Pa. Earthenware and terra-cotta vases in Greek shapes.

GAMBIN, JULIEN. A native of Faenza, Italy, who went to Lyons to manage a faïence works started there by an Italian named Francesco, toward the middle of the sixteenth century.

NEVERS PLATEAU ASCRIBED TO GAMBIN.

GAMBIN, SCIPIO. A faïence worker called to Nevers by the Duc de Nivernais (see Gonzaque), and probably a relative of the above. His name appears on the register of several churches of Nevers, where he stood sponsor to several children, with the qualification of *pothier*. Messrs. Gasnault & Garnier say: "In the absence of historical documents relating to the manufactory he had established, we are bound to assume that the first faïence made at Nevers was manufactured under his direction, for the manufacture, the shape and the ornaments of this ware remind one of the majolicas of the

declining potteries of Urbino and Faenza; like the latter, it is invariably decorated with mythological or allegorical subjects and incidents taken from Roman history or the Old Testament. The outline is traced with manganese and the painting is inferior in beauty and purity to that of the faïence it was intended to imitate, owing to the absence of the special glaze (marza-cotto) used by the Italian painters to cover their paintings and which served as a kind of translucent varnish, thus admitting of the employment of more brilliant and varied colors. It must also be said that at that time the use of this superadded glaze had been discontinued in almost every pottery in the Italian peninsula."

GARDNER. An Englishman of this name established a factory at Moscow in 1787, but nothing is known as to its products.

GARDUCCI. An artist of Urbino, 1477.

GARNER, ROBERT. An apprentice of Whieldon and afterward a potter at Fenton.

GARNIER, EDOUARD. An accomplished French ceramist and member of the Musée des Arts Decoratifs, who has written several important works on pottery, the most important of which is his "Dictionnaire de la Ceramique," to which we are indebted for much exclusive information. M. Garnier also occupies the important position of curator of the Sèvres National Museum.

GARRETT, THOMAS. A partner in the house of Copeland (which see) from 1843 to 1847.

GAUDRY, ALEXANDER. A charming painter of animals, pastorals, scenes from La Fontaine's fables, etc., at St. Amand.

GEIJSBECK POTTERY COMPANY, Golden, Col. Established for the manufacture of dinner ware in 1899.

GELZ. (See Hochst.)

GEMINIANO COZZI, Venice—A. D. 1765. (See Venice.)

GEMPIN WARE. This ware was made in the Province of Owari by a Corean called Gempin, who settled in the Village of Seto A. D. 1590. It is painted very roughly with cobalt under the glaze, though this painting in cobalt had been practiced years before and was not a Corean invention. The art of making Gempin ware perished with the founder, and specimens are of great rarity. There is preserved in Japan a pot used as an incense burner, one inch high and three inches in diameter, which is esteemed as a rare and valuable object.

GENEST. A talented painter at the Vincennes factory.

GENNEP, Duchy of Luxemburg. At Gennep, in the ancient Duchy of Cleves, about the end of the last century, pottery of red

clay of an ordinary quality was made, covered with engobes and decorated with incisions, sometimes accompanied with reliefs in colors. Some very large dishes bear inscriptions and dates varying from 1690 to 1785. The early decoration is composed of flower ornaments that possess a certain character, and later of religious subjects or various personages. Several are signed Antonius Bernardus von Vehlen, 1770-1771, or Albert Murs. The appearance of the Gennep pottery is generally of a dirty yellow or green.

GENTILE, BERNARDINO. An able painter on Costello wares about 1700.

GERMANY. The natural conditions are so favorable in Germany to the manufacture of pottery that its rapid extension is scarcely to be wondered at. Clays of all descriptions are abundant, from the finest kaolin downward, as are also the necessary minerals used in combination with these clays, such as feldspar, quartz, cobalt and manganese. The number of factories now engaged in the production of pottery is over one thousand, giving employment to between sixty and seventy thousand workpeople. Without considering the early epoch of German pottery, dating from the Stone Age, or that made by the Romans during their incursions there, it is safe to assume that the Germans were making enameled faïence two centuries before Luca della Robbia had perfected it in Italy. Traditions state that a potter of Schelestadt, in Alsace, whose name is not even preserved, but who is said to have died in 1283, discovered tin enamel. There is at Leipsic a glazed frieze consisting of tiles with high relief heads of Christ and his Apostles in dark green enamel, dated 1207. At Breslau is a tomb representing Henry IV. of Silesia, who died in 1290, stretched upon a tomb surrounded by twenty-one bas-reliefs. Such works as these are indicative that this was not by any means the birth of the art, their character plainly showing how impossible it would be to regard them as the products of an art in its incipient stage. Two

GERMAN ENAMELED STONEWARE CRUCHE, SIXTEENTH CENTURY.

hundred years later the Hirschvogels with their fine faïence had established the reputation of Nuremberg as a pottery center. The founder of the family, Veit Hirschvogel, was born in 1441, and died in 1525. One of his sons, Augustine, has left some very artistic works with medallions, etc., in relief. At Strehla is a fine terra-cotta pulpit dated 1565. Hans Kraut, who died in 1590, made tiles and bas-reliefs at Villengen, in the Black Forest, in the style of Nuremberg. Hochst and Marburg were both important seats of the industry. During the seventeenth and eighteenth centuries the industries took a wide extension, among the most important places being the Bavarian towns of Anspach, Goggingen and Bayreuth. Before the middle of the eighteenth century Nuremberg had instituted its modern style—blue arabesque borders on a bluish glaze, surrounding centerpieces of fruit, etc. A more distinctively German production is the stoneware usually called Grès des Flandres, and of which we have spoken at length under the head of "Flanders." This salt-glaze ware is so distinctive, is altogether so different from anything before produced, that it seems reasonable to suppose it was a German invention, though attempts of a more or less ridiculous character have been made to place the credit of the invention elsewhere, as narrated under the heading of "Salt Glaze." This stoneware is a hard and impervious body, granular in texture, and glazed with common salt, which, thrown into the kiln at its greatest heat, volatilized, and, combining with the silica in the clay, formed a thin glazing resembling in its texture the skin of an orange. Three kinds of clay were used—a rich brown, a creamy white, and a slaty gray—the main center of production being in the district known as Rhenish Prussia. Leigburg, near Bonn, was the seat of the oldest and most important manufacture, and flourished early in the sixteenth century. Stoneware was largely made at Raeren, near Aix-la-Chapelle, and at Cologne, a fragment of Raeren ware now in existence being dated 1539, which is the earliest dated example known. "Vrouw Jacoba's Kannetjes" (see Jacquelaine, of

HIRSCHVOGEL.

Bavaria) must have antedated this by over a century, as she died in 1436. These were without ornament, and may be classed as common stoneware, to which the pots called "graybeards" belonged. (See Bellarmines.) Most of this stoneware, though well formed, is rudely ornamented and of coarse composition. Early in the sixteenth century a finer ware was made, the so-called Grès des Flandres, ornamented with reliefs made from molds of wood and beautifully executed, the designs being mostly scriptural or heraldic. Contemporary with this was the blue and gray stoneware with elaborate incised designs, the best specimens of which date from 1500 to 1620, after which the art began to decline. Bottger, when prosecuting his researches in 1708 looking toward the production of porcelain, produced a red stoneware of great density and of a metallic ring when struck. For nearly a hundred years the thoughts of potters and chemists had been turned to the production of a body equaling the specimens of Oriental porcelain which were being brought into Europe; and, though artificial porcelain had been produced at Florence in 1575, and even at an earlier date at Venice, it was reserved to Germany to produce the first hard porcelain in Europe. The story has been fully told already in these pages under the titles of "Dresden" and "Bottger"; so it only remains to record the date of Bottger's manufacture of porcelain, which may be safely placed at 1709. Great efforts were made to preserve the secret at Meissen, but in spite of the oath of secrecy the secret was betrayed, and hard porcelain was in consequence successively made at Anspach, 1718; Bayreuth, 1720; Hochst, 1740; Neudeck, 1747; Berlin, 1750; Baden, 1753; Ludwigsberg, 1758; Limbach, 1760. This does not exhaust the list of factories where hard porcelain was made

FLEMISH STONEWARE CRUCHE, SEVENTEENTH CENTURY.

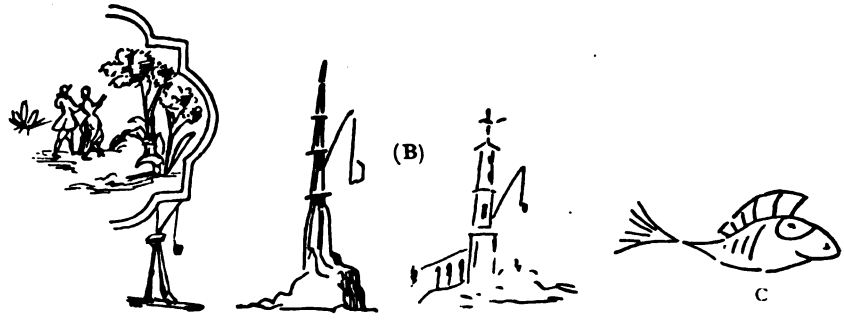
directly owing to Bottger's discovery. In some places the industry was short-lived; others have continued to the present day, vying with the parent house for supremacy. Of these, the most successful has been Berlin, enriched originally to the almost annihilation of Meissen. In a country so rich in natural resources it is no wonder that the number of factories steadily increased—increased to such an extent as to make an almost ruinous competition, which resulted in a cheapening both in manufacture and decoration until at length there was nothing to recommend the wares but their price. But happily this reproach exists no longer, the last few years having seen a decided advance both in the quality of the ware and the character of the decorations. If these latter are losing some of their German characteristics they have gained an added charm in their greater delicacy. This change has been effected by the influence exerted by a limited number of houses, and by the introduction of American capital. Villeroy & Boch, with their excellent stoneware; the wonderful productions of the Herender factory, Zsolnay's beautiful glazes, the charming majolica of Schwarz of Nuremberg, the art productions of the New York and Rudolstadt Pottery, the Royal Bonn and Pirkenhammer china, have all been potent factors in this German renaissance. Nor should the name of Schmuz-Baudirs be omitted. He is really a painter, and came to make vases quite by accident; and what was at first a freak came very soon to be a profession. His new forms and manner of ornamentation, which is in the style of cameo work, are, for all their originality, developed strictly on the basis of the principles that determine the manufacture of pottery.

GRES DE FLANDRES.

GERA, Thuringia. Hard paste porcelain was made here in 1780. Eggshell china of good quality was produced.

GERARD, DUFRAISSEIX & Co., Limoges. (See Porcelaines, G.D.A.)

GENOA, Italy. According to Piccolpasso, there existed here in the sixteenth century a manufactory of faïence of which he indicates the style of decoration; but it has probably been confounded with that of Venice of the same epoch, though but little is known of one or the other. Later in the seventeenth and eighteenth centuries the products of the Genoan manufactories are so easily confounded with those of Savona that many authorities have denied its existence. However, some pieces of elegant form and covered with a beautiful enamel are distinguished by a decoration particularly characterized by the presence of little personages well posed and drawn with some spirit (A), usually in connection with factories or trees and in separate *motifs*. They also bear the mark of the lantern of the port of Genoa, that Savona could not claim (B). Two pharmacy bottles in the Sèvres Museum, decorated in camaieu blue with animals running between clusters of foliage, also attributed to Genoa, are marked with a fish (C). Perhaps it is best to notice here that the fish is also found on certain faïences attributed to Seville.



GEORGIA. The State of Georgia is rich in clays suitable for the making of pottery, and we find as early as 1766 specimens were shipped to England, and that Wedgwood and others experimented with them. Many specimens of coiled ware made by the Indians have been found in various parts of the State.

GERARDMER, Vosges. There was made at Gerardmer in the 18th century pottery of variegated or marbled paste, in the style of that generally attributed to Orleans and Apt, and which is of at least equal quality. It bears often the name "Gerardmer" impressed in the clay.

GERAULT. Soon after the discovery of kaolin in France by Count de Brancas Lauraguais in 1758, Gerault, or, to give him his full name, Charles Claude Gerault Daraubert, engaged in the manufacture of porcelain at Orleans. He acquired the kaolin mines at St. Yriex-la-Perche and probably commenced manufacturing about 1764.

GENSAI HACHITA founded a factory at Sakai, Japan, in the Tensho period (1573-91) and made earthenware fireholders for use at the tea ceremonies. The factory has been discontinued.

GEYER & KORBITZ. (See Eisenberg.)

GHISBRECHTS, LAMBRECHT. Master potter at Delft, where he came and established himself in 1640, and where he died in 1644. Pieces are attributed to him of a polychrome decoration, with brilliant enamel and bright colors, representing birds, cocks and ducks very skilfully executed, and which are marked with an "L G."

GHISBRECHT, LAMBRECHT KRUYK. Master potter established at Delft in 1645, son and successor of the above. He made faïence of elegant form, decorated in an individual style in rather pale camaieu blue on a back ground of faint blue. He marked with a monogram G K, or with a G above a K.

GIAN MARIA MARIANA. Also an Italian artist and contemporary with above.

GIANNANTONIO, FEBERIGO DI. An Italian ceramic artist who worked about 1530.

GIEN. Hall, an Englishman, who had been at Montereau, founded the industry here in 1820. In 1866 the old works were pulled down, and a modern factory erected. About 1870 some good reproductions of Rouen and Strasburg dinner ware were produced, and specimens are now valuable. Ornamental pieces, with the designs outlined on the biscuit and the colors then applied, were also produced. M. Garnier states that nothing but common earthenware is made there now. M 98.

GIEN FAIENCE.

GIESE. A potter of this name made very beautiful faïence with colored relief ornaments and well-executed flower paintings at Stralsund, Pomerania, from 1738 to 1788.

GILARDONI FILS, A. BRAULT, & Co., France. Their exhibit of *grès cerame* at the Paris Exhibition was of a most distinctive character, the little statuettes representing "The Monks of Dijon" being particularly fine. "The Lion," by Barye, is a splendid study of animal life.

GILDING. (See Gold.)

GILES, J. A decorator of Kentish town, London, who, in 1788, misleadingly advertised with reference to Worcester china "that

the enameling branch is performed in London by the said J. Giles."

GILLINGWATER. A manufacturer of Lowestoft. Founded in 1757. (See Lowestoft.)

GINORI. (See Doccia.)

GIOANETTI, DR. The only Italian manufactory of hard porcelain was founded by Dr. Gioanetti at Vineuf, near Turin, toward the end of the last century.

GIORGIO. (See Andreoli.)

GIOVANNI DELLA ROBBIA. Son of Luca della Robbia. He signed his works in full.

GIRARD, PIERRE. A potter at the Ile d'Elle, near Thouars, France, 1735-42.

GIROLAMA DELLA ROBBIA. Son of Luca della Robbia. He went to France, where he executed several works. One of his pieces is said to be at Siena. He afterward became a monk.

GIUSTINIANI BROTHERS. Potters of Naples in the eighteenth century.

GIYOGI. A Japanese priest and potter, and a native of the Province of Idyumi, who is said to have invented the potter's wheel, and who flourished in the time of the Emperor Mommu (A. D. 696). Samples of earthenware actually made by him are to be seen in the Temple of Todaiji, in the Province of Yamato. A notable specimen is a flask inclosed in a light framework of rattan, said to have been made by him about 730. It is eight and three-fourths inches high and nearly eight inches in diameter, and is of a gray ware, showing on the face the marks of the wheel. The name is sometimes written Giyoki.

GLAZE. Glaze may be described as a specially prepared glass which is ground fine in water and then spread over the ware and again fused by firing. The composition varies very considerably, the component parts having to be nicely adjusted to the body on which it is to be applied. Its simplest form is the glaze of French hard porcelain, which is almost pure petunste. Glass or silicious glaze is formed by fusing sand with an alkali, either soda or potash. If oxide of lead is added to this, transparent plumbiferous glaze is the result, which can be converted into an opaque enamel by the addition of oxide of tin. These glazes may be colored with a variety of other oxides without losing their transparency. The introduction of a glaze to protect the surface of the ware is of very early origin, but it is not known to a certainty whether it originated in India, Egypt, Assyria or Babylon. Salt glazing is elsewhere referred to.

"On Greek, Etruscan and Roman pottery, a subdued and hardly apparent glazing was applied to the surface of the pieces, but it is so slight as to leave a barely appreciable effect upon the eye beyond that which might be produced by a mechanical polish, and so thinly laid on as almost to defy attempts at proving its nature by chemical investigation; it is, however, supposed to have been produced by a dilute aluminous soda glass, without any trace of lead in its composition, the greater portion of which was absorbed into the substance of the piece, thereby increasing its hardness and leaving only a faint polish on the surface of the ware."

GLASGOW. There is quite an extensive potting industry here, comprising a good grade of earthenware, stoneware, tile, Rockingham ware, etc. Messrs. J. & M. P. Bell & Co., the Campbellfield Pottery Company, Cochrane & Fleming, F. Grosvenor, and John Thompson & Sons are the principal manufacturers of earthenware.

GLASGOW POTTERY, Trenton, N. J. (See John Moses & Sons Company.)

GLASS, JOSEPH. A manufacturer of slip decorated ware at Hanley, whose works were in existence in 1710. We give an illustration of a four-handled tyg bearing his name. A cradle bearing his name is also known.

FOUR-HANDLED TYG.

GLASSER & GREINER, Schmiedefeld. China manufacturers. Established 1809.

GLATIGNY, ATELIER DE, Versailles. A number of artists are engaged here chiefly in the manufacture of pottery, which is produced anonymously; that is, no individual name is signed to any piece, the members of the association having made this one of their fundamental rules. From the men who prepare the clay to the fireman whose judgment assures the proper amount of heat, all are considered equally responsible, and consequently no one assumes either credit or blame by signing his name to a piece. The result of this loyal effort to make the name of the whole more brilliant than

that of one individual might hope to be has been most encouraging. It will be curious to observe the future of this experiment, which denies to the craftsman the credit his work is entitled to and which is but a return to old conditions, especially in the event of a decided success. That would be the most severe test. As to what has been accomplished, a writer in "The Artist" says: "Every day the laboratory produces fresh enamels, purple reds, Labrador blues, etc.—every color is there. This vase seems carved out of granite, that of flint, another is crinkled and dull like an old-fashioned oxidized bronze from Pompeii; others have the appearance of polished marble. In all this research, so rare in these days of industrial competition, the studio of Glatigny is a strong manifestation of the nobler feeling animating modern art. By his independence, by his conjunction of science to art, by his practical application of new discoveries, he takes the first rank among modern ceramists."

GLOBE POTTERY COMPANY, East Liverpool, Ohio. This firm commenced business in 1881, under the style of Frederick, Shenkle, Allen & Co., making yellow and Rockingham ware. In 1888 they were incorporated as above, and in 1897 added the manufacture of semi-porcelain.

GLOT, RICHARD. (See Sceaux.)

GOAT-AND-BEE MILK JUG. (See Chelsea.)

GOBEL, F. & W., Oeslau, near Coburg. China. Established 1879. M 99.

GOBERT. M. Gobert, one of a group of artists of great talent who, previous to 1871, practiced at Sèvres the art of enameling on metal, and who were able to revive the finest productions of Leonard Limosin, Penicaud and Reymond.

GODENIUS. (See Gustafsberg.)

GODS OF GOOD FORTUNE. The seven gods of good fortune appear frequently on Japanese pottery. Their names are as follows: (1) Fokurokujiu, the god of longevity, distinguished by an abnormal development of head, a long beard, and carrying a rough staff; his chief attributes are a sacred tortoise and a stork, and he is sometimes attended by a white stag. (2) Yebis, brother of the sun, the god of daily bread, represented as a fisherman, occasionally with a large fish attached to a rod, fish being a favorite food with the Japanese. (3) Daikoku, the god of riches, a short figure holding a miner's hammer, and seated on or near bales of rice; he often has a large bag, and, quaintly enough, is not unfrequently attended by rats, though they are more likely to impoverish than enrich the owners of the rice. His attributes are emblems of the great source of wealth

in Japan—rice cultivation and mines. In former times the wealth of the Daimios was calculated by the number of kokus of rice their estates produced, and the quantity of copper and gold obtained from their mines. (4) Hotei, the god of contentment, a fat old man with a bare belly, holding a bag and a hand screen. He is often accompanied by children, who play all kinds of tricks with this good-natured Diogenes of Japan. (5) Jurojin, a dignified figure in the costume of a learned man, carrying rolls of writing on the end of a staff and holding a hand screen; a young stag follows his footsteps. (6) Bishamon, the god of military glory, dressed as a warrior, and holding a spear and a small pagoda. (7) Benten, the goddess of love, richly dressed; sometimes attended by fifteen boys, her children. Of these divinities the first four are the most popular.

GOGGINGEN (Bavaria). This manufactory, established about 1750, appears to have produced only faïence decorations in camaieu blue, and sometimes in the style of Moustiers. A dish with a festooned border, in the Museum of Sèvres, is covered by a great shield, supported by the arms of Joseph, Landgrave of Hesse-Darnstadt, Bishop of Augsbourg, and is signed on the back "Goggingen."

GOINCOURT (Oise). In 1795 a potter named Martin established here a little fabrique, to which he gave the name of "L'Italienne." The fabrique existed but a short time, and the decoration was chiefly in vignette. There were also made here many statuettes of groups of saints, virgins, animals, etc., bearing the mark "L'Italienne."

GOKUHIN. A Japanese term applied to firing when the article fired is placed in a sagger, covered with a lid, and the joint luted so as to seal it hermetically. When fired the sagger has to be broken. The process is only used in firing valuable articles.

GOLD. The gold used for decorating pottery is of two kinds—pure gold, twenty-four karats fine, and liquid gold. The former is mixed with quicksilver, ground very fine, and a little flux added. This ground mixture is then blended with a medium so that it can be used with a brush. "Liquid gold is the result of the chemical change known as reduction. A solution of gold is mixed with a special combination of oils, and the resulting emulsion is laid upon the ware in lines or tracings in the same manner as gold would be. The action of the fire drives off the oils, and leaves an extremely thin film of brilliant gold."—*Binns.* Unfired gold was used by the ancient Greeks. Liquid gold is claimed as a Dresden invention. Up to 1765, at least so far as English wares are concerned, the gold was not fired, but simply attached by means of japanners' gold size. Wedg-

wood's earliest works in C. C. being occasionally enriched with it. According to the Catalogue of the Museum of Practical Geology, the first successful attempt at applying gold leaf for ornamental purposes on earthenware was made by Sarah Elkin, then in the employment of Wedgwood. Although the present method of gilding was discovered prior to 1800, as late as 1832 Dr. Lardner writes: "Gilding on porcelain is performed with or without fluxing material, the gold adhering either by the incipient fusion of the porcelain glaze, or the flux employed. When used without flux the ware must be moistened with gum water or japanners' gold size, leaf gold laid on with cotton wool and the ware put in the muffle that it may be burnt. If flux is employed it should be rubbed fine, diluted with gum water, spread on the parts designed to ornament, and when nearly dry leaf gold laid on it." The present method is said to have been first used by John Hancock when employed by Turner, of Longton.

GOMBEI, GOSU. A Japanese potter who learned from a Chinaman who visited Nagasaki the method of painting with vitreous colors on the glaze. His productions are known as Idsumo ware, and he lived about 1658. Early in this century a skilful potter named Hanraku made successful imitations of this old ware which are highly esteemed and are known as Rakuzan-yama.

GOMBRON WARE. Horace Walpole, an indefatigable collector and connoisseur of pottery, several times in his letters—one is dated 1755—alludes enthusiastically to his specimens of Gombron ware. For many years this was as enigmatical as the Murrhine vases of the Romans, but is now generally conceded to refer to Oriental porcelain. M. Solon says: "The India Company is responsible for the name 'Gombron ware,' applied in England to Oriental porcelain, and particularly to the rough pieces of green color which, from the fact of enjoying great repute in the East, were specially recommended by the importers to the English lover of exotic curiosities. It was at Gombron, a port situated at the entrance of the Persian Gulf" (and on the Persian side, and now known as Harmozia), "and where the Eastern traders had for centuries centralized the Chinese, Persian and Indian trade, that the India Company established their first counters in 1623. Acting as European agents to the commerce carried on by their predecessors, chiefly with the Asiatic regions, they created a large outlet in the mother country. It was then customary in England to designate foreign importations by the name of the port from which they were shipped. Hence the term 'Gombron' ware applied to the pottery of that region. In some

instances it seems to have reference to the aggregate of the ceramic productions brought over by the company; but in other cases a distinction is clearly established between 'green Gombron ware' and 'china'—a word used concurrently to specify the white porcelain decorated with blue or other colors. Both terms occur frequently in the contemporary writings, but it does not appear that any marked partiality was ever displayed by the English collector in favor of either the green or the white ware." Chaffers states that "This Gombron ware was that made in Persia itself, which was shipped from Gombron, a port on the Persian Gulf"—a view endorsed by Mr. Charles F. Binns, who thus describes it: "The feature of this consisted in fine perforations which were filled in with the transparent glaze. The small bowl is an example of this ware, which is considered by M. Jacquemart to rank as soft porcelain, and to have suggested to the Japanese the production of the 'grains of rice' porcelain." M. Solon has, we think, the best of the argument in ascribing a Chinese origin to this Gombron ware."

GONZAGUE, LOUIS DE, was related to Catherine de Medici, and became Duc de Nivernais by his marriage with Henriette de Cleves, the eldest of the three daughters of the last Duc de Nevers. It was owing to his influnce that the potting industry was founded at Nevers, he having interested himself in bringing Italian potters there for that purpose. (See Nevers.)

GONZAYEMON, TAMURA, originated the manufacture of Kutani ware in the seventeenth century. He was a subject of the Prince of Daishoji, and had studied the Hizen process of porcelain making.

GOODWIN, JOHN. A potter of Trenton who in 1870 was a partner in the old firm of Taylor & Speeler, the pioneers of the potting industry in Trenton. A year later he was bought out by his son, James H. Goodwin.

GOODWIN POTTERY COMPANY, East Liverpool, Ohio. Established in 1844 by John Goodwin, a Burslem potter, who received his training, as did his father before him, at the factory of John Edwards. Rockingham and yellow ware only were made until 1877. Mr. Goodwin died in 1875 and the works were continued by his three sons, James H., George S. and Henry J. Goodwin, under whose management the business very considerably increased. In 1877 the manufacture of C. C. was begun, to which a decorating department was quickly added. The works were incorporated in 1893. Mr. James H. Goodwin, its first president, died in November, 1896. M 100.

GORDON, R. G. A Staffordshire potter in the eighteenth century.

GORODAYU SHONSUI, of Ise, Japan. He returned from a visit to China in 1513, settled in the Province of Hizen, and is credited with having made the first Japanese porcelain. A specimen of porcelain made by him in China and marked with his name is preserved at Nara. Another piece bearing the four characters "Shon-sui Buji," meaning "Shonsui is safe," is supposed to have been sent to his own country for the purpose of informing his friends of his health.

GOSABURO. A Japanese potter of Imado-machi, in the northern part of Tokio, 1840.

GOSS, W. H., Stoke-upon-Trent. Mr. Goss started in business in 1858, and though his output has never been large, it has always been characterized by delicacy of manufacture and gracefulness of design. At the London Exhibition of 1862 he had made sufficient progress for his exhibit to call from a contemporary art paper such encomiums as: "With what exquisite taste this manufacturer has worked out the several designs he has produced in fictile wares. Here classic forms blend harmoniously with the more ordinary shapes. Few displays of porcelain are to be seen which excel those of Mr. Goss. But in the Parian statuettes, etc., under notice, the perfection of art manufacture seems certainly to have been reached." Mr. Goss was a large factor in the production of Belleek ware. Not only did he successfully produce it himself, but it was workmen from his factory who carried with them the composition of a body which Mr. Goss had adapted from an older one that rendered the manufacture of Belleek possible in Ireland. Mr. Goss has succeeded in making this delicate china strong enough to withstand boiling water. He also invented and introduced a new and better manner of fixing jewels on china. He is the relative and the loving biographer of Mr. Llewellyn Jewett, the great authority on English pottery. Giving his personal supervision to the details of his business, he has yet found leisure to devote considerable time to art's twin sister, literature, his archæological contributions being eagerly read. M 101.

GOSSELIN. M. Gosselin, whose researches follow those originally made by Andre Pottier, the learned archæologist of Rouen, proves that there existed about 1542 a manufactory of enameled tiles at Rouen, of which Masseot Abaquesne was the potter. (See Abaquesne.)

GOSU. A kind of Chinese porcelain, dark gray in color and painted in dark blue. The body is coarse.

GOSU GOMBEI. (See Gombei.)

GOSUKE, KATO. A Japanese potter of Mino. (See Mino ware.)

GOTHA. A china manufactory was established here by Rothenburg in 1780. M 102.

GOTO, SAIJIRO, studied porcelain making in Hizen, and about the year 1650 erected a kiln at Kutani, making ware with a red ground and gold outline. This ware is now known to us as Kaga ware.

GOUDA, MARTINUS. Master potter established at Delft in 1671, at the Sign of The Roman. His faiences, decorated in camaieu blue, without much skill, bear a mark composed of characters, ciphers and signs disposed in a peculiar manner, evidently in imitation of Chinese marks.

GOUDA, Holland. (See Estie.)

GOUFFIER, ARTHUR. Formerly governor to Francis I., and Grand Master of France. He was the husband of Helene de Hangest, who after his death made the celebrated Oiron ware.

GOUFFIER, CLAUDE, son of the above. He continued the manufacture of Oiron ware, and, being strongly attached to the Dauphin (Henri II.), had made for him a number of faïence objects decorated with the arms of France and the Prince's monogram, and as these pieces are comparatively numerous the name of Henri Deux was given to the ware of Oiron.

GOUFFIER, GUILLAUME, son of Admiral Bonneret, a Knight of Malta, who became Bishop of Beziers, for whom was made one of the most beautiful specimens of Oiron ware—a plateau, or salver, bearing in the center his escutcheon.

GOULT (Vanchese). This little manufactory, founded about 1740 by M. de Doni, Lord of Goult, who established it in his own castle, produced faïence of an individual style which is generally attributed to Moustiers, whence the greater part of the decorators were obtained by M. de Doni. It is from Goult that the greater number of faïences have come, with a decoration of portrait medallions spiritedly drawn and painted in dark camaieu yellow. The borders are generally composed of verses more or less delicately written, or on a single line forming a circular frieze. *"Un nconnu pour vos charmes soupire, son sort Egalcroit celui des dieux, s'il pouvoit lire, dans vos beaux yeux,"* etc., etc. ("An unknown sighs for your charms. His condition would equal that of the gods if he could read in your beautiful eyes," etc., etc.) A very beautiful plate of the Sèvres Museum is decorated in soft and harmonious tones, recalling the Moustiers' decoration, but, as usual, the subject is in camaieu yellow.

GOULT WARE.

GOUYN, CHARLES, is mentioned in the *General Advertiser* of January 29, 1750, as "late proprietor and chief manager of the Chelsea House." Nothing more is known of him; but it serves to show that the Chelsea Works had then been in existence some time. (See Chelsea.)

GRÆCO-EGYPTIAN. Egyptian pottery showing Greek influence. It was of varying shades of gray and red, the ornamentation consisting of lines, animals and floral forms. At the same period was introduced the custom of making writing tablets of this ware.

GRAFFIATO. (See Sgraffiato.)

GRAINGER, THOMAS, Worcester, 1800; Grainger & Wood, to 1812; Grainger, Lee & Co., after 1812; Grainger, George, after 1839. (See Worcester.)

GRAINS OF RICE. Formed by cutting through a thin paste, and afterward filling up with glaze, which leaves the design perfectly transparent. It is said to be of Persian origin, and was largely made by the Chinese.

GRANADA. (See Hispano-Moresque.)

GRANGEL, F. O. Painter of faience. Worked at Alcora, and possibly at Moustiers. His work is remarkable for its fineness and

the extreme skill manifested. He signed "F. O. Grangel." (See Alcora.)

GRANITE, WHITE. An earthenware body of greater hardness and density than the ordinary earthenware.

GRAVANT. A working potter to whom may be credited the successful inauguration of the Vincennes factory about 1745. (See Vincennes.)

GRAYBEARDS. (See Bellarmines.)

GREATBATCH, DANIEL. An Englishman who came to this country in 1837. He was a skilful modeler, and found employment at the Jersey City Pottery, where he modeled the well-known water pitcher with a handle in the shape of a hound, and a hunting scene in relief on the side. He afterwards worked for Mr. James Carr and at Bennington.

GREATBACH, DANIEL. An engraver of Stoke-upon-Trent. He cut the plates of the well-known Tower pattern issued by Spode in 1797. An illustration of this pattern appeared in the article on Copelands.

GREATBATCH, WILLIAM. An apprentice of Whieldon who afterward went into business for himself and became celebrated for teapots with the story of the Prodigal Son on them in black print. He was an excellent potter, and Wedgwood later engaged him for life, and actually did employ him until his death, which occurred January 7, 1802. He was in Wedgwood's service for forty years.

GREECE. Except on the supposition that Greek ceramic art had its rise in Cyprus, as the Greek alphabet came from the Phœnician, we seek in vain for the beginning of that artistic expression which was afterward to become so brilliant, and which to-day we turn to for example of purity of design, being obliged to imitate that which we can never surpass, Unlike the Assyrians and Egyptians, the Greeks had no record of their history; but for present purposes it will perhaps be sufficient to assume that their painted pottery commenced about 700 B. C., and continued for a space of five hundred years. The commonest clay was used, but the loving care of the potter and the touch of genius raised it far above common earth. At first the decorations had been for ornament alone, known as the Doric; then came the idea of illustrating story. Cimon of Cleonas is the earliest Greek painter mentioned, about 550 to 500 B. C. Henceforth every vase was made the medium of some story, either of history, romance or mythology. At first a red body was used, on which the subjects were painted in black, 500 to 400 B. C. Then came the same pottery painted over in black, the figures being on

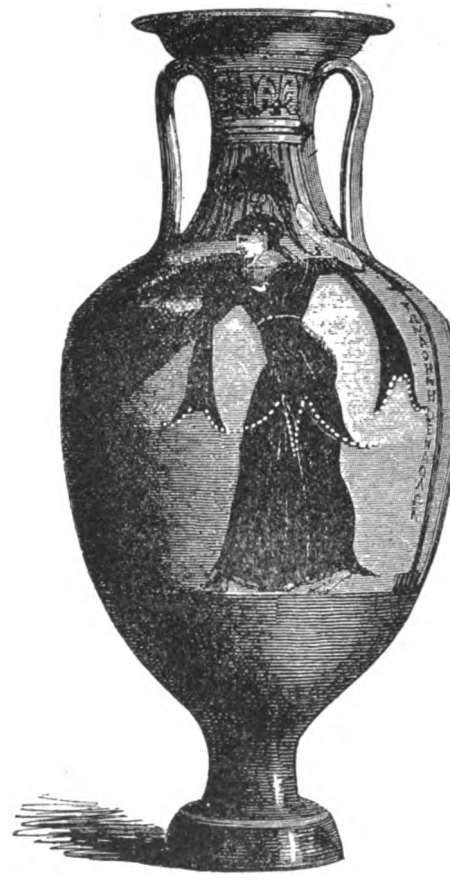
AMPHORA.

ARYBALLUS.

the red or yellow of the ware, 400 to 250 B. C. A more florid style followed in which ornaments and arabesques were used, sometimes heightened with gold. Then followed vases in white, painted with figures sometimes in outline, often in several colors. The acknowledged best period was when the figures were painted in red with the details in black, white being used for female faces and maroon very sparingly in parts of the design. The forms were exceedingly beautiful and diversified. Of over fifty of them we know the names and the use they were intended for. The potters and artists perpetuated themselves by signing their works. Among the names of the latter we find Æriades Asteas, Clitias, Doris, Euthymides, Hischylos, Oneismos, Phil-

RHYTON.

tias, Poseidon, Socles and Teuxiades. They were not employed exclusively at one factory, any potter having a chance at their services. Some were potter and painter combined. Amasis is an example of this. Nicosthenes was a renowned potter who made tall and slender forms of amphoræ with broad, flat handles. Fifty made by him are known. Timagoras was another great potter. Klitias painted one of the best known of Greek vases. It is known as the François vase and represents the story of Hercules in black on red. Exekias was both potter and artist—and so the list might be continued. Specimens of these Greek vases are very numerous, twenty to fifty thousand being the estimate of various ceramic writers. The luster of the Greek vases was of such extreme thinness as to prevent it being classified as a glaze or enamel, and its composition has never been discovered. Much of the beautiful polish on the red vases was obtained by the potter's use of the lathe. Our illustrations show an early piece called an aryballus, a panathenaic vase, an amphora by Nicosthenes, and a rhyton or drinking-cup. The panathenaic vase is in the Museum of the Louvre and has the name of the chief Archo Archippus (B. C. 321) inscribed upon it. Such vases were publicly awarded to the victors of panathenaic festivals.



PANATHENAIC VASE.

GREEN, GUY. A partner in the firm of Sadler & Green, Liverpool, the inventors of printing on pottery. (See Sadler & Green.)

GREEN, JOHN. (See Don Pottery.)

GREEN. Two brothers named Green established about 1758 the works at Leeds from which the celebrated cream-colored ware was issued. (See Leeds.)

GREEN. A firm of this name made painted ware somewhere in the Staffordshire Potteries toward the close of the eighteenth century.

GREEN, T. A. & S., Fenton. Manufacturers of china. M 103.

GREENWOOD POTTERY COMPANY, Trenton, N. J. This company was incorporated in 1863, the first officers being Charles Brearley, president; James P. Stephens, secretary and treasurer; James Tams, superintendent. To-day Mr. Tams is the president and Mr. Stephens the secretary and treasurer; so that practically the works from their inception to the present day have been under one management. The early days of the factory were days to test the courage of the bravest. Experiment after experiment was made, and though each showed a glimmering of success toward the end aimed at, the bulk of the ware was not satisfactory, and the contents of kiln after kiln were consigned to the rubbish heap. To continue in the face of such failure a man of sheer intensity of purpose could alone face such disheartening results. The Greenwood factory may fairly and literally be said to be built upon its failures; but every failure taught something, and success came at last. It was worth waiting for when it did come, and made ample amends for all the past. Distinctively an American production, the vitrified earthenware of the Greenwood Pottery Company was a distinct advance in ceramics. This hotel china, as it is called, though the definition is hardly comprehensive enough, combines the best properties of both china and earthenware with the minimum objectionable qualities of either. Being highly vitrified, it was not liable to craze, and its peculiar toughness rendered it at once the best available material for hotel and other uses where rough usage is to some extent excusable. Art goods with metallic decorations were also produced, but the body was hardly so well adapted for this as for table purposes; and though some fine specimen pieces were made, this branch of the business was discontinued. M 104.

GREINER, G., was proprietor of several factories—Volkstadt, Wallendorf and Grosbreitenbach. In the Prime collection there is a Wallendorf service with a rebus: "Wandle auf" over roses, and "und" over forget-me-nots; reading: "Wandle auf Rosen und Vergirs-mein-nicht."

GREINSTADT. (See Frankenthal.)

GRENZHAUSEN, near Coblentz, Rhenish Prussia. Grenzhausen and Hohr appear to have been the most important centers for the manufacture of stoneware, especially stone pitchers of gray or bluish body enriched by blue, violet or brown enamel, and decorated by a variety of stamped ornaments, figures, armorial bearings, masks, etc.,

put on in haphazard fashion by means of molds, without any idea of harmony in the conception of the decoration, but always with much richness and cleverness. A great number of "handwarmers" in the form of books were made at Grenzhausen, as well as ink-stands, salt-cellars, etc.

GRELLET BROTHERS. Manufacturers of china at Limoges prior to 1784, when the manufactory was absorbed by Sèvres, Gabriel Grellet acting as director. In 1793 the works again passed into private ownership.

GRÈS DES FLANDRES. (See Flanders.)

GRÈS EN FRANCE. Of late years a great impetus has been given to the manufacture of stoneware in France, and many artists and sculptors have devoted themselves to its production. Some wholly satisfactory results have been obtained which though sometimes of extreme simplicity, relying upon a tone of color, a harmony of shades, or even a texture, are none the less beautiful. Among these the works of E. Moreau-Nelaton deserve more than this passing

DALPAYRET. DELAHERCHE. BIGOT.

notice, whilst Hoentschel, J. A. Rudder, M. Faivre, M. Jeaneney, A. Bigot & Co., M. Madrassi, Jean Rivière, M. Jacobson, Dalpayret & Lesbros, August Delaherche, E. Chaplet all call for honorable mention and have all received unstinted praise at the hands of those best able to judge.

GRESLEY, Sir NIGEL. (See Church Gresley.)

GRIFFE, LA. (The Claw.) This was the sign of a manufactory of faïence founded in 1662 by Cornelis van der Hoeve. The products of this manufactory, often quite common, but sometimes of extreme fineness and great delicacy of execution, are generally decorated in camaieu blue. They bear a mark resembling the claw of a bird.

GRIFFIN. The crest of Earl Fitzwilliam, used as a trademark at the works of Brameld & Co. after the year 1826.

GRIFFO. An Italian potter who established a factory at Lyons, France, in 1555. He came from Genoa.

GRINDLEY, W. H., & Co., Tunstall. Manufacturers of a fine class of earthenware. M 105.

GROEN, JOHANNES. Master potter established in 1683 at Delfshaven. Some quite original pieces of faïence are attributed to him—among others a polychrome statuette with movable head, signed with his initials.

GROENLAUT, IAN. A potter but little known, established at Delft in 1660. He made figurines with polychromatic attempts. A little statuette of the Virgin, decorated in camaieu blue, with a green mantle, bears on the stand the initials "I. G."

GROSBREITENBACH. (See G. Greiner.)

GROS CAILLOU. A Parisian manufactory about 1765.

GROTESQUES. In Italy the decoration called grotesques was used at Faenza, and especially at Castel-Durante, in the beginning of the sixteenth century. It was composed at that time of foliage, symmetrical and rolling, terminated by the bodies of monsters, birds, seahorses, masks, etc., executed in gray, or another color, on a background usually of intense blue. Later, this same decoration, made more delicate, surrounds little medallions in camaieu, imitating antique gems, and of an arrangement that recalls the compositions of Jean d'Undine and of Perino del Vaga, that were painted on a white background, first at Ferrara, later at Urbino, principally in the Fontana Manufactory. There are very remarkable specimens in this style in the Louvre. In France the decoration in grotesques was only used at Moustiers, where it was composed of caricatures and ridiculous figures, put on hap-hazard and as isolated subjects on the bottoms of dishes and plates, and painted in camaieu yellow and

green, green mixed with black, or simply yellow. Some of these grotesque figures are in the style of Callot, but oftenest they are only the mediocre fantasies of the talent of the painters of the country, or copied a little from each. Occasionally, however, they are executed with great care.

GROWING POTTERY. "Recently there was sold in New York, according to an exchange, for no less a sum than $1,000, an old-fashioned china plate of the extremely rare kind which is known to the collectors as 'growing crockery.' From the plate itself had sprung to a height of more than a third of an inch a sort of eruption of beautiful crystals that seemed to take the form of elegant trees and miniature pagodas. The growing crystals were gradually rising higher and higher, and they had brought up with them the enamel surface of the plate at every point where they had sprung from the body of the latter. Such plates are chemical manifestation of the rarest possible kind, and only a few years ago a teapot, the property of a lady in Woburn Place, London, that had become covered with beautiful crystals in this way was sold to a collector for $5,000. The clay of which such china is made contains alumina and magnesia, and in certain cases these are so acted upon by the presence of sulphuric acid as to produce fibrous crystals that are in reality very much of the character of Epsom salts, or crystals of alum. Only few, very few, instances of this 'growing crockery' have ever occurred, hence the 'fancy' prices that examples fetch. The plate sold the other day had belonged to a poor person who had never attached much value to it." We have never seen such a piece as is here described, and diligent inquiries among ceramists fail to find any one who has. It is not, however, an impossibility, as such pieces could be produced by a simple chemical process.

GRUE FAMILY, THE. (See Castelli.)

GRUEBY FAIENCE COMPANY, Boston. Organized in 1897 by W. H. Grueby, G. P. Kendrick and W. H. Graves. Mr. Grueby is the discoverer of the glaze from which the ware takes its name, a glaze so soft and beautiful, so perfectly glossless, that at one bound it leaped into public favor. Mr. Kendrick designs the shapes, many of which display much originality. The decorations are of the simplest character, but it is a simplicity that is truly charming—a leaf, a half-unfolded flower, some trifling wayside suggestion, either incised or in slight relief, something to accentuate the color of the body. It is this masterly restraint, these mere suggestions, that give half the charm to Grueby-ware and make the eye dwell with affectionate longing on its beautiful velvety surface. Several colors

have been successfully used, but the greens are by far the best. It is rarely a second color is used, and then only very sparingly. The name of the ware has become a generic one for mat glazes, and its success has brought out a number of imitations. Mr. W. Ellsworth Gray, in *Brush and Pencil,* says: "Many competent critics regard this ware as the highest achievement of the potter's art in this country. It has a distinct individuality in character and tone. It is not the product of imitation, not mere decorated china, not clay vessels

tricked out with designs borrowed from workers in other forms of art. It is simple and chaste, relying for its effect in a perfectly legitimate way on the superb finish of its surface, on the subdued richness of its colors, and on the ideas embodied in its designs. In this regard it is practically unique among American fictile products." Quick recognition not only at home but also abroad has followed. the company having been awarded two gold and one silver medal

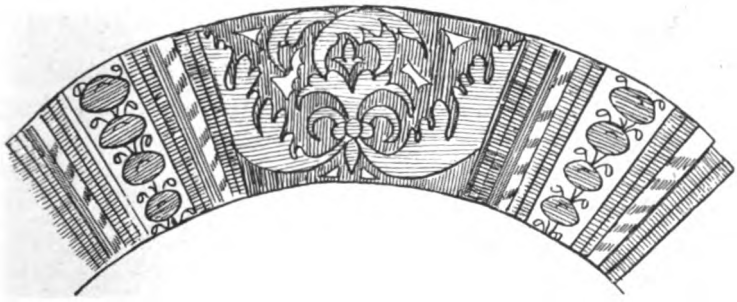
at the Paris Exhibition of 1900, and a gold medal at the St. Petersburg Exhibition of Ceramics in 1901.

GUAGNI. A painter of Turin, 1577.

GUATEMALA. Pottery similar to that of Brazil is made here, and such as the natives have been acquainted with for the last three centuries. The use of the wheel is unknown.

GUBBIO, Italy. This small town, situated on the eastern slope of the Apenines, was incorporated in the sixteenth century in the territory of the dukes of Urbino, under whose enlightened patronage the artist potters of the duchy received the greatest encouragement. The fame of Gubbio rests almost entirely on the beautifully painted and lustered pieces of Maestro Giorgio Andreoli.

GUERHARD. (See Dihl.)



GUERIN, W., & Co., Limoges. Manufacturers of porcelain. M 106.

GUETTARD. A chemist in the establishment of the Duke of Orleans at Bagnolet who in 1765 rediscovered the kaolin deposit of Alençon, originally discovered by Count Lauraguais.

GUIBAL. Sculptor to King Stanislas, under whom Cyffle, the celebrated Luneville sculptor, studied.

GUIDO, FLAMINO. One of the Fontana family of artists at Urbino.

GUIDO, MERLINO. Brother of the above.

GUIDOBALDO II., Duke, 1540 to 1568. Under his patronage Italian majolica reached its highest development.

GUIK-MON. The arms of the Mikado of Japan are twofold—the Kiro-mon (official) and the Guik-mon (personal). Both are frequently found as component parts of Japanese ceramic decorations.

GUILLEBAUD, or Guillibaud, Jean. Potter established at Rouen, Rue Tous-Vents, about 1720. He is generally considered as having been the first to use polychrome decoration on faïence, composed of ornamental branches of flowers, pagodas, or flowering

landscapes in the pseudo-Chinese style, recognized by the borders in which quadrilateral designs in red and green are cut by bouquets or branches of flowers symmetrically arranged. There are a number of pieces of admirably executed faïence known to be Guillebaud's, among them a series of pieces being part of a splendid service with the arms of the Montmorency, Luxemburg, and with the armorial bearings of M. de Forbin-Janson, etc.

GUILLOTINE (plate called the). About 1872 there was much talk of plates representing the "Execution of Louis XVI.," and two little pamphlets appeared about this time and published the reproductions with long dissertations upon them. It has since been proved that these sinister faïences were the audacious work of impostors, and that *l'assiette à la guillotine*, still found to-day among the specimens of some credulous collectors, was a work of recent manufacture.

GULENA, M. A modern potter of Moscow, Russia.

GUSTAFSBURG, near Gothenburg. Works were established here about 1820 by Godenius, who made services decorated in blue and gold, and later a very beautiful Parian ware. Of late years the factory has considerably improved its productions in all directions and has assumed importance. Their exhibit at Paris of sgraffito ware colored in quiet greens and blues showed good taste and mature judgment. The professor at the manufactory M. Gunnar Venerberg has shown himself to be an artist of the first rank. Mr. Wenerburg, one of the Gustafsburg artists, does really charming work.

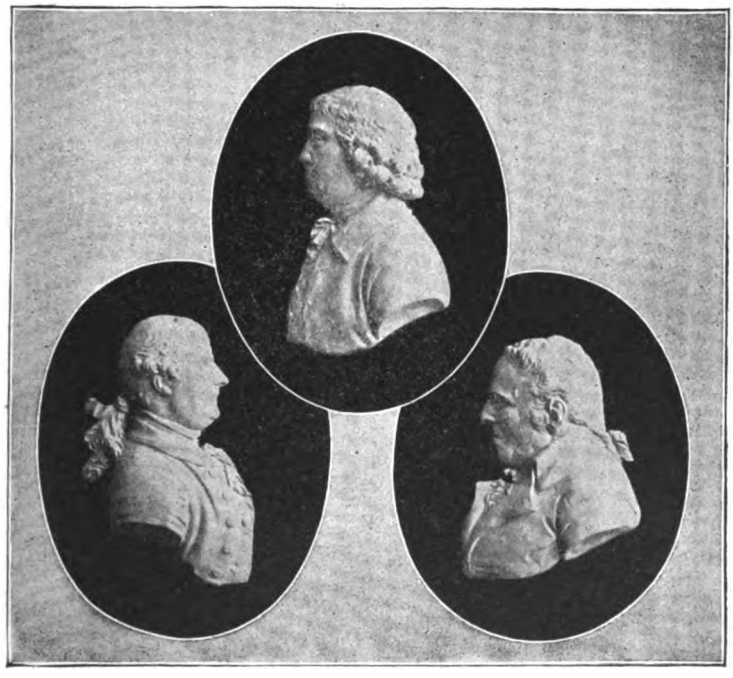
GUY & HOUSEL. The manufactory of the "Porcelaine à la Reine," in the Rue Thiroux, Paris, belonged to them early in this century. Their ware was marked "G. H., Rue Thiron à Paris."

H

HAAK, AREND DE. Faïence maker at Delft in 1780. M. Havard mentions a fine piece of faïence of pipe-clay signed in full with his name.

HACHIZO. A Japanese potter of the Province of Chikuzen, who made an imitation of Chinese ware of a red-colored clay known as Ko-Takatori. A. D. 1467-86.

HACKWOOD, WILLIAM. A successful portrait modeler employed by Wedgwood. His medallions of Wedgwood and his relations, and of many local celebrities, are evidently characteristic likenesses. The group herewith shows Wedgwood and his partners, Bentley and Byerly.

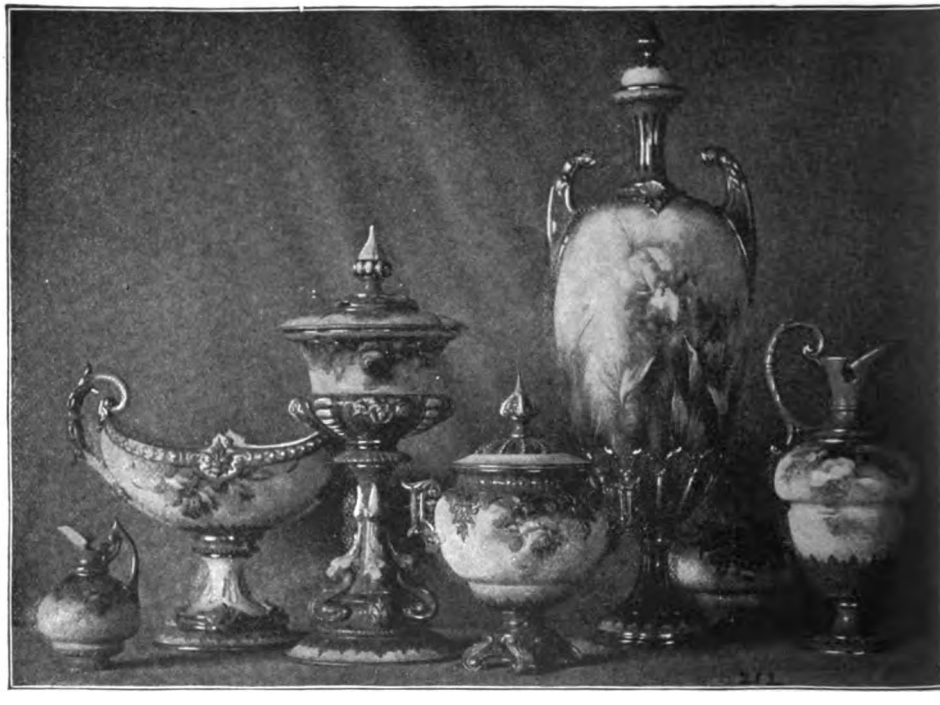


BENTLEY. WEDGWOOD. BYERLY.

HACKWOOD, W., & SON. The New Hall Works, Hanley, passed into their hands in 1842. They made earthenware only marked "HACKWOOD," 1842 to 1856.

HADLEY, JAMES, & SONS, Worcester. This artist pottery was founded in 1896. Previous to this Mr. James Hadley had been the principal designer of those beautiful forms so characteristic of the Worcester Porcelain Company. From the commencement of the undertaking it was endeavored to make the products as distinctive as possible from those of any other manufactory, and it is a matter of congratulation to the firm that they have in a great measure

succeeded. The illustrations, whilst giving an idea of the refined character of the products, do not convey any sense of the beautiful harmonies of colors employed or of the fine texture of the ware. The city of origin of this ware is likely to provoke comparison, which would not, however, be to the disadvantage of the younger firm. Richness of effect is obtained by using different colored clays instead of body colors for the handles of vases, etc. The colors



HADLEY.

used in painting have a most remarkable softness, and effects are produced of which the eye never wearies, suggesting all the beauties of a day in June. The firm was incorporated in May, 1900. Mr. Hadley's sons are associated with him in the business. M 107.

HADJI MINAS, Turkey. A modern factory producing reproductions of Persian pieces very carefully executed. The mark is a star inside a crescent.

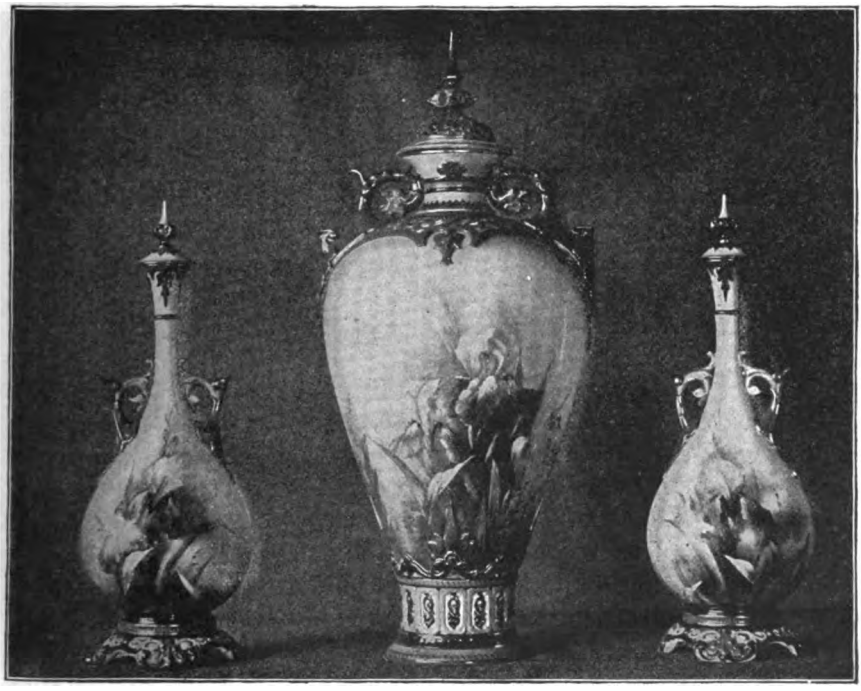
HAEREN, VAN. In partnership with Van Palland, in 1754 had a factory at Overtoom, Holland. It was closed in 1764, and the

materials were transferred to Weesp, where they were used in founding a porcelain manufactory.

HAFFRINGE, Boulogne. A modern factory producing a superior grade of porcelain.

HAGER, HORTH & Co., Zell. Manufacturers of majolica. Established 1858. M 108.

HAGI WARE. "The origin of the pottery at Hagi, in the Province



HADLEY.

of Nagato, is unknown. At first only the common kind of ware was made there. It is stated that in the period Yeisho, in 1510, the manufacture of tea utensils was commenced; it appears, however, to have been confined to tea bowls. A century later a Corean named Rikei, who when in Japan adopted the name of Korai Saiyemon, settled at Hagi and began to make a kind of faïence. A part of the raised edge at the bottom of each piece made by the Corean is cut out, leaving a space of triangular form. This is a peculiarity common to the pottery imported from Corea. The same occurs in

wares made in the Island of Tsushima and in the provinces of Higo and Satsuma, where the art had also been introduced from Corea. The product up to the period Shoho is generally called Ko hagi; whereas the articles manufactured by Korai Saiyemon are known by his name. His descendants of the eighth generation are the present manufacturers."—*A. W. Franks.*

HAGUE, THE. (See Holland.)

HAGUENAU, twenty-eight kilometers from Strasburg (Alsace). In 1696 there was a manufactory here whose products are not determined. Charles Hannong established another one here in 1724. After the decline of the manufactory of Strasburg, of which it seemed a branch, the fabrique of Haguenau was transferred little by little. In 1787 it passed into the hands of three associates, Austlet, Barth and Vollet, who made faïence stoves and the usual objects in pipe-cay without any artistic character. The Haguenau faïence has no special mark; confounded with those of Strasburg, like them they bear the monogram of the Hannongs. To Haguenau are attributed some plaques painted in camaieu, signed H. E. V. Lowenfeck, who came from Hoscht to direct the manufactory in the absence of Paul Antoine Hannong. (See Hannong, and Strasburg.)

HAJI. A Japanese legend says that in the year B. C. 29, in the Province of Idsoumi, there lived a certain worker in stone and pottery named Nomino-Soukoune. It was customary at that time for slaves to be buried with their dead masters, that the latter might have some one to wait on them in the next world. On the death of the Empress, Nomino quickly made some images of clay which he induced the Emperor to bury with the Empress as substitutes for her favorite attendants. The cruel rite was then abolished, and the potter, as a reward and distinction, was allowed to take as his surname Haji, the artist in clay.*

HAKU-AN. A Japanese potter (1467-86). Only six of the bowls made by him are known, and these are in the possession of a Japanese nobleman.

HALDER, JACOBUS. Master potter established at Delft in 1765 at the sign of "The Greek A." Besides the ordinary productions of the factory there were figurines and animals made in relief that he marked with his monogram, surrounded by the A.

* Morley, in his "Rise and Fall of the Dutch Republic," says: "The Celts cast into the flames the favorite animals and even the most cherished slaves and dependents of the master."

HALE, JOHN. Historical engraver to King George III., and whose works are highly appreciated, when a lad painted ornaments on china for the manufactory at Chelsea.

HALE, JOHN, & SONS, Sytch Pottery, Burslem. Were manufacturing pottery there in 1829.

HALL, RALPH, Swan Bank Works, Tunstall. Early in this century he issued a large number of plates and services with American views. He was succeeded by Podmore, Walker & Co.

HALY, PHILIPPE. Potter of Nevers in the eighteenth century. The signature is found on plates decorated with detached bouquets, and bearing in high relief and painted in natural colors fruits, olives, eggs, nuts, etc., modeled with great perfection. He was probably the son of François Haly, whose name is on a statue of St. Hubert in the Museum of Varzy.

HAMILTON, Ohio. There was a small pottery here about 1884, but it was only in existence a short time. Ware which received its decoration from painted molds was made. A Mr. Sims was the manager and potter.

HAMILTON, Sir WILLIAM. Brought the Portland vase to England in 1784.

HAMME, JOHN ARIENS VAN. A Dutch potter who took out a patent in London, April 23, 1671, for the "art of making tiles and porcelane, and other earthenwares, after the way practiced in Holland."

HAMMELKERZ, PAULUS. A painter at Schaffhausen, Germany, 1743.

HAMMEN, JAN ARIENSZ VAN. Master potter established at Delft in 1661. There are attributed to him a large number of vases and bottles, usually in sets decorated in camieu blue that have nothing remarkable about them, and polychrome faience of a very beautiful brilliance. His monogram, which may very easily be confounded with that of Joseph Hannong, is accompanied by a number for classification.

HAMMERSLEY, FREEMAN & Co. (See Astbury.)

HAMMERSLEY & ASTBURY. (See Astbury.)

HANAU, Hesse-Electoral. This manufactory was founded about the middle of the seventeenth century by two Hollanders, and at the beginning of the eighteenth century became the property of Simon van Alphen. An inkstand, decorated with bouquets and blossoms clearly drawn in black outline, and washed with somewhat opaque green, blue in two tones, yellow and violet, is marked Hanau.

HANCOCK, JOHN. The following letter appeared in the Stafford-

shire *Mercury*, 1846: "In the notice of the death of John Booth, of Well Street" (Hanley), "inserted in your last week's paper, it is stated that he was the inventor of luster for earthenware. I beg to state that this is incorrect, as I was the original invenor of luster, which is recorded in several works on pottery, and I first put it in practice at Mr. Spode's manufactory for Messrs. Daniels & Brown (London dealers), and continued to make it long before Mr. Booth or any other person attempted to do so. If Mr. Booth's friends should doubt the truth of this statement, I shall be very happy to furnish them with proofs on the subject, or answer any questions which they may think proper to ask. Perhaps Mr. Booth's friends are not aware that I am still alive, although at the advanced age of eighty-one. By inserting this you will oblige one whose character is at stake. John Hancock." Hancock was born in 1765 and died 1847. He was one of the first to introduce and practice the art of making colors in the Potteries. He was much respected by the old workmen, who always came to him to help them out of any difficulty. Many of the recipes worked from by the potters of the present day are his, and the general flux of the Pottery district known as Flux No. 8 is the No. 8 of his private book. The lusters alluded to in the letter quoted are the gold, silver and copper lusters of Staffordshire and are not to be confounded with the lusters of the Italians.

HANCOCK, or Handcock, R. An artist of the Battersea Enamel Works, who in 1756 went to Worcester. He has been advanced as the inventor of the printing process on pottery, and there seems to be good reason to suppose that the Worcester process may have been an independent one from that of the Sadlers of Liverpool. The Worcester process, whether it was the original or not, was claimed by Holdship, the lessee of the factory, although his claim was immediately challenged. A jug with the painted portrait of the King of Prussia inspired a long poem in the *Gentleman's Magazine* for December, 1757, and it was dedicated to Holdship. This poem, slightly altered, was reprinted in the Worcester *Journal* for January, 1758, with the addition of the following significant couplet:

"Handcock, my friend, don't grieve, though Holdship has the praise,
'Tis yours to execute—'tis his to wear the bays."

In 1769 Hancock became a partner in the Worcester company, but his partnership only existed until 1774.

HANCOCK, WILLIAM. A modeler at Brownfields about 1850-60. One of his best pieces was a jug reproduced in stoneware, bearing the arms of England, Scotland, Ireland and Wales.

HANDLEY, A. A figure painter who in 1879 was at Worcester. Soon afterward he removed to Stoke-upon-Trent and was employed in several factories in that neighborhood.

HANFORD, ISAAC. Made stoneware at Hartford, Conn., toward the close of the eighteenth century.

HANGEST, HÉLÈNE DE. (See Faïence d'Oiron.)

HANKE, R., Ludowitz. Chiefly ornamental goods. Established 1853. M 109.

HANLEY. One of the most important of the towns known as the Staffordshire Potteries. It is a place of considerable antiquity. Where the old Hall Works now stands was, immediately after the advent of the Romans, the home of William de Hanley. Near by once stood Hulton Abbey, the home of the monks of the Cisterian Order. One of the oldest, if not the oldest factory in the district, is still called the Abbey Pottery, tradition stating that the monks originally made pottery there. The present church was erected in 1788. In 1811 Hanley had about 4,500 inhabitants, its present population being about 50,000. There are some seventy or eighty manufactories in Hanley, about ninety per cent. of them making earthenware.

HANNONG. The Hannongs occupied a place of the utmost importance in the ceramic history of the eighteenth century. The first, Charles-François, founded in 1709, at Strasburg, Rue du Foulon, a manufactory of pipes and stoves in glazed earth, with relief in the style of those of Nuremburg; about 1721 he associated with him a workman named Wackenfeld, who had left Meissen to come to Strasburg, where he had tried, but without success, to build a porcelain fabrique. As a result of this association, Hannong produced both porcelain and faïence concurrently. Success attended his efforts, and his affairs prospered so well that he was soon forced in response to the urgent demands flowing in from all sides to establish in 1724 a second manufactory at Haguenau, twenty-eight kilometers from Strasburg. He died the 19th of April, 1739, aged seventy years. As early as 1732 he had given his fabriques to his two sons, Paul-Antoine and Balthazar. The first, more intelligent and more industrious than his brother, soon became sole proprietor of the Strasburg manufactory, which was by far the most important,

and in which, while still continuing the manufacture of porcelain, he reserved considerable space for the manufacture of faïence, on the white enamel of which he was able in 1744 to apply decorations in gold, of which he submitted the first specimens to Louis XV. at the time of his journey to Strasburg. In 1750 the manufacture of his porcelain had so greatly developed as to give umbrage to the privileged manufactory at Vincennes—later the royal manufactory of Sèvres—and despite the protection and efforts of the Duke de Noailles, Paul Hannong was obliged to obey the decree that enjoined him to demolish his porcelain ovens within a fortnight. He immediately went to Franckenthal in the Palatinate (now Bavaria), where he established himself and where he was joined by Ringler, who when he found his papers had been copied quitted Hochst in disgust. Here they made a fine porcelain equal to that of Saxony and distinguished for the excellence of its gilding. The manufactory was purchased by the Elector Palatine Charles Theodore, and was by his patronage raised to the eminence it long maintained. He still maintained in his manufactory at Strasburg and in that of Haguenau, which had again become his property, the manufacture of faïence under the direction of his sons, Pierre-Antoine and Joseph. The latter being a man of superior intelligence and ability, carried on the business prosperously until the time when the *ferme royale*, or royal tax, was resumed to tax their products, according to the ancient tariff applicable to merchandise coming from reputed foreign provinces. Joseph Hannong remained alone upon the departure of his brother for Paris, and courageously fought against these exaggerated and unjust pretensions without being able to obtain redress. In 1779, after having seen his business and manufactories stopped for five years, a prey to financial embarrassments that increased day by day, surrounded by infuriated creditors, with ruin confronting him, suffering even imprisonment by order of the prince-bishop of Strasburg, he was obliged to acknowledge himself vanquished, and fled precipitately to Munich, where he soon died in abject misery. Pierre-Antoine, of a restless and enterprising character, after having sold to Sèvres the secret of the manufacture of hard porcelain, known only at that time under the name of German porcelain, and having seen his bargain canceled—an annuity, however, being granted to him—because of his inability to insure its production, engaged in various enterprises, none of which appears to have been very successful. From time to time he founded several manufactories of porcelain, and directed for quite a while the fabrique of faïences established in 1767 at Vincennes by Martin des Aubiez—a manufactory that had

but an ephemeral existence and whose products, probably confounded with those of Strasburg, cannot be identified. In 1773 he founded a factory in the Faubourg St. Lazare, Paris, afterward known as the Fabrique du Compte d'Artois. The Compte d'Artois afterward became Charles X. The pretended secret of the manufacture of porcelain that Pierre Hannong sold to Sèvres consisted in effect in the use of kaolin, of which at that time there was no known deposit in France, and consequently it had to be brought at great expense from Germany. The history of the faïence industry of Strasburg, which disappeared completely a few years after the departure of Joseph, in spite of efforts made to revive it, is summed up in that of the Hannong family whose names have just been given. We owe to them the application on faïence of a stanniferous enamel process which served in porcelain decoration—that is to say, in the use on the baked enamel of colors mixed with a base that made them adhere to the enamel at a much lower temperature than that required where the enamel entered into fusion—a process that was adopted more or less everywhere, particularly in France and in Germany, and which singularly modified the conditions of the production and decoration of faïence up to the time when this last ceased to exist to give place to English pipe-clay, and especially to porcelain. The marks of the Hannongs varied little; they were always composed of the following monograms (A, B, C) alone or accompanied by numbers, designed

in all probability to facilitate assortment. There is also attributed to the elder Hannong the mark D, but we have never yet encountered it.

HANRAKU. (See Gombei.)

HANSUKE, KAWAMOTO. A present-day manufacturer of the Japanese Seto ware.

HARBURG, Germany. A glass painter named Johan Schaper, 1620-70, attained some celebrity here. He also painted mugs, etc., usually in brown on a white enamel.

HARDING. A Staffordshire manufacturer of printed ware at the end of the eighteenth century.

HARD PORCELAIN. Also called a natural porcelain. The body is a kaolin paste and the glaze pure feldspar. (See Porcelain.)

HARIDSU. In the Middle Ages, Haridsu, a lacquer worker of Kioto, was in the habit of covering the Raku ware made by himself with a unique and splendid lacquer incrusted with figures of flowers, insects, etc.

HARIMA-NO-DAIJIO, FUJIWARA-NO-FUJIMASA, and entitled Nin-Sei, of the family of Nono-Mura, who was living about 1644, erected kilns in various places—at Awata, Omura, Mizoro, Kinkozan, Seikanji, and Iwakurazan.

HARKER POTTERY COMPANY, East Liverpool, Ohio. These works were stablished in 1840 by Benjamin Harker, Sr. He was succeeded by his son, George F. Harker, who carried them on under the style of George S. Harker & Co. until his death. His widow and two sons continued the business under the same style until 1890, in which year it was incorporated as the Harker Pottery Company. Rockingham and yellow ware were made until 1879, in which year the manufacture of them gave place to that of white granite. Their trademark is a bow-and-arrow and the initials of the firm. M 110.

HARLEES, DIRCH. Nephew and successor of Johannes Harlees, to whom he succeeded in 1795. The pieces executed by him that he might be received as master in the Guild of St. Luke are preserved in the archives of Delft. He marked with his initial, accompanied with "The Bottle."

HARLEES, JOHANNES. Master potter established at Delft about 1770, at the sign of "The Porcelain Bottle." Faïence of exquisite blue, but rather crude drawing, are known to be his, marked with his monogram, sometimes accompanied by "The Bottle."

HARRIMAN, J. A. VAN, Delft. About 1650.

HARRISON, JOHN. At the close of Wedgwood's apprenticeship he entered into partnership (1752) with John Harrison and Thomas Alders, the latter a potter at Cliff Bank, Stoke-upon-Trent. The partnership only lasted about a year. Harrison was not a practical potter, and his cupidity soon ended in a disagreement, and he retired from the firm, his place being taken by Whieldon. The principal wares made at Cliff Bank were mottled earthenware, agate knife handles, and various kinds of tortoise-shell and marble. Soon after Harrison's retirement the works were bought by Spode, pulled down, and cottages erected in their stead.

HARTLEY, GREEN & Co. (See Leeds.)

HARVEY ADAMS & Co. (See Adams, Harvey.)

HASHIMOTO, CHIUHEI. A native of the Village of Kawaski, in the Province of Shimodsuke; studied the manufacture of Banko ware with Banko Yiusetsu and successfully established a kiln in his native place, where he produces a similar ware from materials found in the vicinity. His work is not considered equal to the original.

HASIMO, Province of Onri, Japan. (See Hiboko.)

HASSELLS, ANTHONY, of Shelton. Was engaged by Joseph Ring, of Bristol, 1786, to initiate the manufacture of earthenware in that city. A fine, thin and neatly turned cream color was the result, and with this improved body the manufacture of the coarser Delft ware in Bristol came to an end.

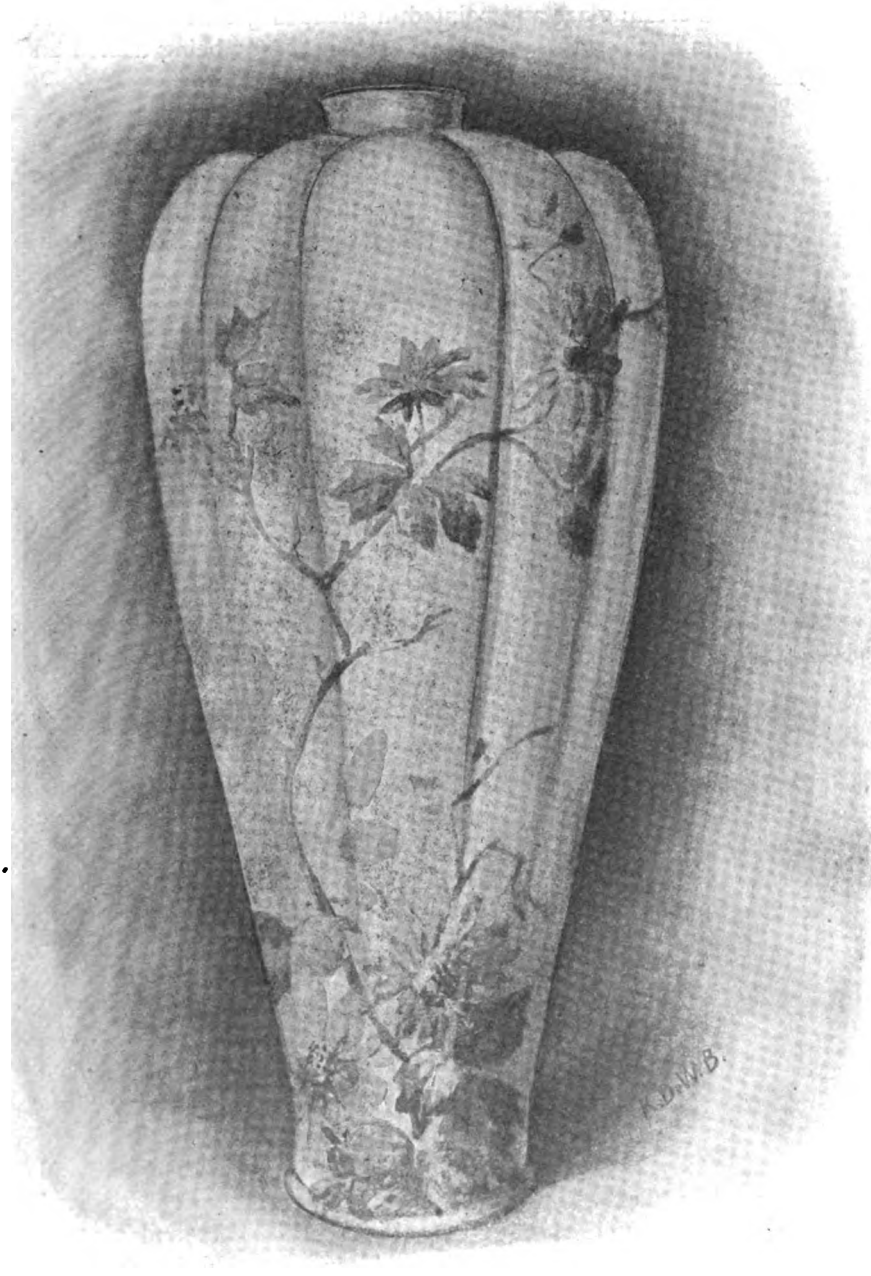
HASSELLS, JOHN. Had a factory at Shelton in 1787. He was probably a brother of above.

HATCHET (The Porcelain). This was the sign of a manufactory established at Delft in 1679 by Huibrecht Brouwer. In 1697 it was under the direction of Joris van Torenburg, and in 1759 under Justus Brouwer, who gave it considerable extension. The well-known products of this manufactory are varied, but always highly finished and of beautiful color. They are marked with a hatchet traced more or less carefully in blue managanese on pieces of polychrome decoration. (For mark see Brouwer.)

HATTERSLEY, CHARLES. Was proprietor of the City Pottery, Trenton, N. J., from 1853 to 1856.

HAVILAND & Co., Limoges. It not infrequently happens that important pottery industries owe their origin to foreign influence, and the history of French ceramics is no exception to this. The Normandy pottery was founded by Italian workmen, and they in turn were followed by English workmen, who introduced the manufacture of English earthenware; and it was reserved for an American to develop the resources of Limoges. Mr. David Haviland, an importer of English pottery in New York, in 1839 saw a tea service of French manufacture which appeared to him so superior to the ware he was importing that he decided to introduce it here. There was no mark to guide him, nor could he obtain any information about it; but he was not easily to be discouraged, and with the sole knowledge that it was made in France he started out to solve the problem. Eventually his inquiries led him to Limoges, and though the search had ended, his work had but begun. The shapes and decorations were limited and unsuitable for this market. Accordingly he set to work and furnished to the factories there patterns of plain services, then only made in England, and while they were

executing his commissions for white ware he organized large decorating shops, employed pupils and skilled professors, and in this modest manner started a business destined to grow not only to colossal proportions but to represent a standard of excellence synonymous with all that is best and truest in ceramic art. This radical departure caused something very near approaching a riot in Limoges, and for a time pupils and professors could only go about in bands in order to protect themselves from assault. In 1840 Haviland & Co. initiated the exportation of French china, and though the first four years only averaged about $100,000 per annum, in 1880 the average amount had increased to $1,400,000. When Mr. Haviland, from decorating only, turned to manufacturing, it was with facilities largely in advance of anything then existing in Limoges. Plates are now made entirely by machinery, enabling them to turn out about eleven thousand per day. And while other labor-saving devices were adopted, that the artistic element was not neglected is evidenced from the fact that as early as 1885 two hundred decorators found employment there. Some idea of the extent of the factory may be gained from the fact that it now finds regular employment for about fourteen hundred workpeople. The introduction of color transfer printing was early adopted, and a softness and richness of coloring resulted impossible to attain by "filling-in," except, of course, by the work of skilled artists, which would have been prohibitory for commercial purposes. In 1873 Messrs. Chaplet, Laurin and Lafond originated a process of decorating earthenware, the merit of which Mr. Haviland was quick to recognize, and with the resources at his command he considerably improved it. The pieces are decorated on the wet clay, and are characterized by boldness of treatment, the artistic freedom not being restricted by anything beyond the shape of the piece decorated. Such qualities as strength and assurance result—qualities often conspicuous by their absence in pottery decoration. Messrs. Haviland were fortunate enough to secure the services of such artists as M. and Mme. Bracquemond, MM. Lindenher, Noel Chaplet, Damousse, Lafond and Delaplanche. In the Smithsonian Institution at Washington there are three pieces of this Haviland faïence—two memorial vases, which are described in the article on Historical Pottery, and a tile piece by Bracquemond, illustrating "Human Progress." These are fair illustrations of this Haviland faïence. In addition to this bold style of painting on the flat, the modeler and the painter worked in unison, carving in bas-reliefs, usually unglazed, ornamenting vases of classic form. The illustration on another page is of a



HAVILAND FAIENCE VASE.

vase with a cream glaze and painted in subdued greens and browns. Mr. Charles Haviland in July last was honored by being named an officer of the Legion of Honor. M 111.

HAVILAND, C. F. (See Porcelaines G. D. A.)

HAVILAND, THEODORE. Much of the success that attended the firm of Haviland & Co. was due to the active share taken in its management by Mr. Theodore Haviland. January 1, 1892, the partnership was dissolved, Mr. Theodore retiring from the old firm, which was reorganized as a stock company. Another stock company, with Mr. Theodore at its head, was formed, and they erected an entirely new factory with all the modern improvements, organized an efficient staff, and were quickly in the field with an extensive assortment of shapes and decorations. The success of the enterprise is now assured—a condition that could hardly fail to result from the quality and character of the goods produced. Among the artists employed by Mr. Theodore Haviland may be mentioned L. Jean, J. Martin and F. Martin, whose fish, game and landscape subjects are carefully executed. M 112.

HAWTHORN PATTERN. A decoration on Chinese porcelain largely exported from Nankin during the last century, but which had been known in China since probably the sixteenth century. It perhaps originated at King-te-tchin, the port of export giving it its name. The blossom is not the hawthorn, but that of a Chinese fruit tree. The ground color is blue, with the blossoms and buds in white, the ground varied with dark blue lines, as if in imitation of crackle. The changing tints of the blue give a rich effect, and early samples are extremely valuable. An illustration of this pattern appears in the article on China. Messrs. Audsley and Bowes "Keramic Art of Japan") are inclined to ascribe a Japanese origin to this pattern, stating that the flower is the favorite *ume* of Japan, the emblem of springtime, youth and health.

HAYNES, D. F., & SON, Chesapeake Pottery, Baltimore, Md. This pottery was started by Mr. D. F. Haynes in 1881, and at first was devoted to the manufacture of a ware analogous to majolica, called Clifton ware. Following this came Avalon ware—a body of ivory tint and soft rich glaze. It had sprays of flowers in relief, decorated in colors. In 1885 the manufacture of Parian was commenced, and among other successful pieces produced were some cattle-head plaques in high relief modeled by James Priestman, and plaques representing the seasons, after Thorwaldsen. In 1886 the manufacture of semi-porcelain gave an impetus to the output of the firm. The glaze was extremely rich; and as a praiseworthy attempt was

made to improve the character of the forms and decorations, it met with considerable favor. In toilet ware, too, much originality was displayed, and American pottery began to show something of originality and individuality. In 1887 the style of the firm was changed to the Chesapeake Pottery Company, and in 1890 to Haynes, Bennett & Co.—later to the present style. Mr. Haynes has undoubtedly exercised a very considerable influence on American ceramics, insisting on originality in shapes and designs and the education and proper training of artists and designers with special adaptability to pottery. Of late years the pottery has been largely devoted to the manufacture of toilet sets, jardinières and specialties. M 113.

HAYNES, GEORGE, Swansea. Little is known of the Swansea works until about 1790, when they came under the management of Mr. G. Haynes, and the title of Cambrian Pottery was adopted. Ware similar to that made in Staffordshire was the principal production, both before and after that period, and included mantelpiece figures in enameled white and cream color ware, with a chocolate or orange line painted on the plinth or pedestal. (See Swansea.)

HEATH, JOHN and CHRISTOPHER. Made brown stoneware similar to that of Fulham and Nottingham, at Cockpitt Hill, Derbyshire, prior to 1750.

HEATH, THOMAS, Lane Delft, Staffordshire. Is credited by the historian Shaw with the introduction of Delft ware in Staffordshire about 1710. He describes a dish as having the upper surface tolerably even, but the under surface as being spotted with minute holes, exhibiting the coarse material of the body.

HEATH & BAGNALL and HEATH, WARBURTON & Co. Were potters in Staffordshire about the close of the last century.

HEINBERG, near Thoun, Canton of Berne (Switzerland). In the fifteenth century, at Heinberg and Thoun, there were fabriques established, producing pottery of reddish earth, coarse and heavy, generally designated under the name of old Berne, and decorated by pastillages, with drawings of an archaic character that are sometimes not without interest, especially if compared with modern products of the same character, with pretentious forms and glaring and inharmonious coloring.

HEINTZMANN. A celebrated landscape painter of Nymphenburg, 1747.

HEKIZANDO. A present-day manufacturer of Kutan (Japan) ware.

HELLOT. The director of the Academy of Science, who, by the

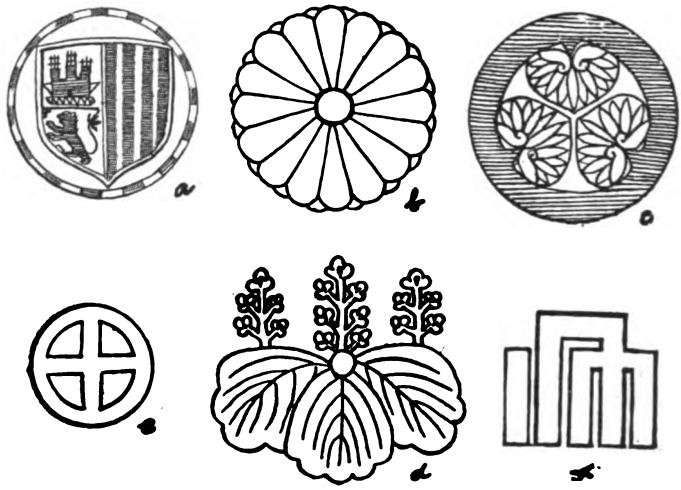
King's order, was attached to the Vincennes manufactory in 1746 to superintend the chemical manipulations. He powerfully contributed to the success of the works, and continued as their leading spirit until his death. (See Vincennes.)

HELSTONE, Cornwall. Where kaolin was first discovered in England in 1755.

HEMPHILL, Judge JOSEPH. (See Tucker & Hulme.)

HENDERSON, DAVID. (See Jersey City Pottery.)

HENRI II. WARE. (See Faïence d'Oiron.)



HERALDRY. Heraldry plays a not unimportant part in the decoration of pottery. On Hispano-Moresque ware badges and coats-of-arms were largely used, the one illustrated (*a*) from the center of a dish with radiating lines, being the arms of Castile and Leon and Aragon. Some of the badges that constitute Japanese heraldry are largely used on Japanese pottery as ornaments—such as the Kikumon (chrysanthemum), the badge of the Empire of Japan (*b*), the badge of the Mikado (*c*), and that of his family (*d*), together with numerous crests of the princes, such as Satsuma (*e*), and as a decorative *motify* the very imposing one of the Prince of Akita (*f*). German stoneware furnishes almost a complete heraldic guide from the prodigal frequency with which heraldic devices were employed. The arms and ciphers of Henri II. predominate largely on many pieces of the celebrated faïence d'Oiron, whilst it has long been a favorite

fashion with families of distinction to have their crests or arms painted on their household services. In the so-called Lowestoft china both useful and ornamental articles are so decorated. The painting of these badges requires that not only should the artist have the requisite facility to portray them, but a good knowledge of heraldry, and a "crest painter" can always command remunerative employment.

BUST OF ADMIRAL LORD DUNCAN. HERCULANEUM.

HERBERT & Co. Nothing seems to be known of this firm except that in the *Affiches de Paris*, May 23, 1754, there is this advertisement: "M. Herbert & Co., to whom belongs the manufactory of 'faience japonne facon de Saxe' (see Japanese Faïence), established Rue de la Roquetto, Faubourg St. Antoine No. 12, make known to the public that they have opened their 'magazine,' where all sorts of merchandise for utility and for ornament in the newest and most satisfying styles, not only as regards shapes, but also in the perfection of the paintings and in the beauty of the work."

HERBERTSVILLE, formerly Old Bridge, N. J. About the year 1800 Van Winkle had a stoneware factory here, using the South Amboy clay.

HERCULANEUM WORKS, Liverpool. About 1793-4 Richard Abbey, who had been apprenticed to John Sadler, the engraver, started, in conjunction with a Scotchman named John Graham, a pottery at Toxteth Park, on the south side of the Mersey, on the site now occupied by the Herculaneum Dock. In 1796 they sold the business to Worthington, Humble & Holland, who engaged as manager Ralph Mansfield, of Burslem. He left them after some years' service, and commenced a small pottery on his own account. In addition to Mansfield, the new company engaged about forty

"hands" from the Staffordshire potteries, and they were transported there by boat. The buildings acquired from Abbey were considerably enlarged and improved, and as Wedgwood had called his new colony "Etruria," the company christened theirs "Herculaneum." The first productions were printed earthenware, which was carefully potted and of a somewhat deeper shade than that of Wedgwood. The company must have done a good trade with America, for specimens are by no means rare of pieces bearing American designs and emblems. Some services had the embossed basket rims, and one of these was printed with views of well-known English scenery. Terra-cotta vases and statuettes in black basaltes were also made, as were also jugs with relief figures. In 1800 the manufactory was considerably enlarged, and again in 1806. Early in the present century china was produced, and its manufacture was continued to the close of the works. The bust of which we give an illustration is in semi-tinted porcelain. In 1833 the company was dissolved, and sold for £25,000 ($125,000) to Mr. Ambrose Lace, who leased the premises to Thomas Case and James Mort. They introduced as a trademark the Liver, which is the crest of the borough of Liverpool. In 1836 they were succeeded by Mort & Simpson, who continued until the close of the works in 1841. Early wares were marked "HERCULANEUM." M 114.

HEREND, Hungary. Moritz Fischer in 1830 established a manufactory of china here whose original products equaled any made in Europe. His reproductions of Oriental porcelain were such as to deceive experts, and were made with the assistance of Oriental workmen. A cabarat in white china with compartments in green decorated with flowers was purchased by the authorities of the South Kensington Museum as a valuable Oriental piece, and its origin was not discovered for some time. Imitations of Dresden and Sèvres were also made, M. Fischer employing workmen from both these factories. The Austrian shield and the crossed swords of Dresden were used as marks, but his name or the word "Herend" was always impressed in the body. The present proprietor is Eugene de Fischer, who has brought the wares to great technical perfection combined with charming decorations. M 115.

HERENG, or Heringle. A potter of Lille, France, about 1750-58. Dr. Prime gives them a separate individuality.

HERMANSZ, GERRIT. Master potter established at Delft in 1614. Several of his productions are known. M. Harvard says: "The pieces attributed to him are very interesting; the engobe is generally

beautiful; the subjects, too ambitious for the ability of the draughtsman, often lack vigor and firmness." They are almost always battles or historic scenes painted in camaieu blue.

HESDIN, France. Jehan de Voleur as early as the fourteenth century was making ware here with a stanniferous enamel. This is of interest as showing that its use was known in France prior to its rediscovery in Italy, though the foundations of the great French industry at Nevers and Rouen were laid by Italian workmen.

HESSE-CASSEL. A china manufactory was established here by fugitive workmen from Meissen.

HESSE, FREDERICK VAN. Potter at Delft in 1730. His signature is found on small objects delicately executed and finely decorated; the letter R that accompanies it leads M. Harvard to suppose that for some years he directed the fabrique of "The Rose."

HETTLINGER. Under the Directory the administration of Sèvres was vested in a triumvirate, of which Hettlinger was a member, occupying this position until 1800.

HEUBACH BROTHERS, Licht. Established 1820. Reproductions of photographs on china.

HEUBACH, ERNST, Kopplesdorf. Principally china and biscuit figures. Established in 1877. M 116.

HEUBACH, KAMPFE & SONTAG, Wallendorf. Established 1765. Their mark must not be confounded with that of Wegley, which it much resembles. M 117.

HIBOKO. "In the early part of the reign of the Emperor Suinin (B. C. 27) the Corean prince Hiboko settled at Hasama, in the Province of Omi, where his followers manufactured a kind of ware somewhat harder than the preceding and marked on the exterior with small lines."—*A. W. Franks.*

HICKS & MEIGH, successors to R. & J. Baddeley, Shelton. They were succeeded by

HICKS, MEIGH & JOHNSON, who were bought out by J. Morley, who united their works to his own at the works now occupied by G. L. Ashworth & Bros.

HIDACHI-NO-DAIJIO. Credited with having been the first potter in Japan to use saggers in firing pottery.

HIGASHI-SHIMA. (See Hizen.)

HIRADO, or Hirata, WARE. Named after the Prince of Hirado, who in 1650 established a factory at Mikawachi, about six miles to the south of Arita. The productions were for the use of the prince and his friends, and among the most characteristic productions was

a porcelain of fine quality decorated in the *sometsuke* (underglaze blue) fashion, with a number of boys playing under a pine tree. The choicest pieces have seven boys, but on the less perfect there are only five or three. The sale of these pieces, except to the prince, was prohibited. Another description of porcelain manufactured here is ornamented with designs in relief, produced by engraving and by tracing in slip. Reproductions of these pieces have been made by Mr. Fukami Suminosuke, of Arita.

HIRSCHVOGEL (The). Potters at Nuremberg. The chief of this family, Veit Hirschvogel (1441-1525), was a painter of glass windows and a potter. He had several sons, of whom one, Augustin Hirschvogel, applied himself almost exclusively to the art of potting. It is to him that is attributed the manufacture of those vases covered by a pure enamel of great brilliance, and bearing on the round or in depressions in the form of niches practically in the body itself figures modeled in relief. (See Nuremberg.)

HISPANO-MORESQUE. Formerly the term Hispano-Arabian was applied to these wares, under the impression that they were contemporary with the ornamental wall tiles such as those that decorate the mosque at Cordova. Two Mohammedan periods must be distinguished in the history of Spain. The first dates from the expulsion of the Goths in the eighth century, and the establishment of the Arabian Caliphate of Cordova; the second from the invasion of the Moors, who drove out the Arabs and founded in 1235 the Kingdom of Granada, which was conquered in 1492 by Ferdinand and Isabella. Though the art of the new invaders had the same origin as the old, yet as no pottery exists of the first period it is correctly styled Hispano-Moresque. In addition to the Moorish style of ornamentation and coloring it is distinguished by its beautiful metallic lusters. Those examples having a decoration in pale luster with ornamentations in blue and managanese are ascribed to the earliest period; those having the ornamentation in the pale luster only, without color, of nearly equal date, as also some of the darker, coppery examples with shields of arms; and of a later period those so glaring in copper-colored luster as to be more painful than pleasing to the eye. After the conquest of the Moors the Christian element was asserted in the decoration of pottery, and in 1566 the last blow was struck at Moorish art by the promulgation of a decree forbidding among other things of the execution of decorative works in the Moorish style. The best known example of this Hispano-Moresque ware is the Alhambra vase, previously described and illustrated.

The fabrique of Malaga was probably the oldest, and that of Valencia the most important, but other potteries existed, and their productions were widely distributed. The Valencia potteries early in the seventeenth century had lost all Moorish character, and the employment of copper luster only was retained.

HISPANO-MORESQUE.

HISTORICAL POTTERY. Through all ages pottery has been made the medium of recording historical events. The Chinese under the Ming dynasty (1368) largely illustrated the history of China. Italy during the Renaissance used historical subjects freely. Nevers ware was made the medium of reflecting the events and politics of the day. Sèvres for a long period did nothing but glorify events in the life of the "Little Corporal." The Peruvians immortalized their rulers by making drinking-cups fashioned after their likenesses. French and English factories both issued pottery commemorative of their scenery and events in their history, and so the practice has continued to the present day, American manufacturers contributing

their quota with souvenirs of the Spanish-American War. After the War of Independence, and for a period of thirty or forty years, English potters made for this country an almost unlimited number of designs commemorating our heroes, statesmen and scenery. With the exception of some pieces commemorative of Washington and Franklin, none of these subjects date earlier than 1800. Patriotism was at fever-heat, and no doubt the initiative was taken on this side, and merchants sent views both to Liverpool and to Staffordshire

LAFAYETTE PLATE.

to be reproduced there. The potters later, seeing the ready sales of such subjects, engraved others, no doubt from materials procured through their agents here. The Liverpool designs were, we believe, generally made from designs furnished by merchants in this country. Communication with England was not of such a character as to place the potter in a position to correctly quote our Constitution and our statesmen, and the Liverpool pitchers teem with such allusions. Stress has been laid on the unpleasant position the

English potter was placed in in executing subjects that reflected on the prowess of his country, and we think unduly so, sufficient allowance not being made for the unpopularity of both wars by a vast number of Englishmen, as evidenced both in their Parliament and press. By far the most interesting series are those which came surrounded by finely designed and engraved borders, and printed in a very rich and deep blue. The engravings were deeply cut so as

"THE SEAT OF GEORGE WASHINGTON, ESQ."

to hold a large body of color, and among them are some of the finest specimens of blue printing that we have ever met with. The subjects in blue date from early in the century to about 1830, when prints in brown, black, pink and other colors superseded them, and the engraving also sensibly deteriorated. These subjects, as pointed out by other writers, are unmentioned by English writers on ceramics —considering the vast number of pieces sent here, rather a remarkable omission. Mr. W. C. Prime, our own ceramic authority, was,

"THE HORNET" BLOCKADING THE "BONNE CITOYENNE."

"THE HORNET" AND "THE PEACOCK."

we believe, the first to call attention to them, since which they have been eagerly sought for by collectors. Mrs. Earle, in "China-Hunting in New England," has given a lengthy list of subjects. Mr. E. A. Barber has also contributed some valuable articles to different periodicals and newspapers. It is almost impossible to give a complete list of these historical pieces, as fresh subjects are being continually unearthed by enthusiastic collectors. On a large jug at Troy, N. Y., made by Enoch Wood, and consisting of a patchwork of scenes and portraits, there are views of "The 'Constitution' Escaping from the British Fleet," and "Engagement Between the Chesapeake and Shannon," which as far as we know have not been seen on other pieces, though undoubtedly they were not specially engraved for the pitcher in question. The Liverpool potters frequently varied the use and position of the prints, sometimes using one design and

"LANDING OF THE PILGRIMS."
REISSUED SEVERAL TIMES.

"SCHENECTADY & ALBANY RAILROAD." RIDGWAY.

"CITY HOTEL, NEW YORK."

sometimes another to fill a vacant space. Thus the "Proscribed Patriots" pitcher is found with half a dozen variations. The Staffordshire designs in blue usually came in complete services, the plates of which have chiefly survived, the single pieces, such as tureens and cover dishes, being but rarely met with. Some had but one subject in the whole service; others had a dozen or more different views. Of the latter, "The Beauties of America" service is a good example, though the title is somewhat of a misnomer, or its sponser had but a dim consciousness of the beauties of America, many of the views representing hospitals,

"CITY HALL, NEW YORK." C. MEIGH.

almshouses, etc. Beautiful as some of these specimens are, and doubly interesting from their historical association, the zeal of the collector has given many of them a fictitious value, as it can hardly be questioned that many of them are absurd as views, caricatures as to design, and valueless as specimens of the potter's art. Dr. Barber describes and illustrates some hundreds of these historical pieces in his book, "Anglo-American China," and the cult has also a monthly magazine, entitled *Old China*, devoted to its interests. We give illustrations of a number of pieces selected, some because they are representative of the best, others because they have not before been published. The deep blue plates were principally made by Enoch Wood, Rogers, Stubbs, Clews, Ridgway and an unknown maker whose initials were R. S. W. The collectors of these designs have been pleased to include as "Historical" a series of reproductions of Rowlandson's "Dr. Syntax's Tours" and a number of Biblical subjects. The absurdly high prices some of these plates bring has, of course, had the effect of bringing reproductions of them on the market. So skilfully are these made that quite recently pretty nearly every antique-dealer in New York was inveigled into buying one or more copies

"FULTON'S FIRST WAR-VESSEL."

"KOSCIUSKO'S TOMB."

"ALBANY CITY HALL."

of the "Arms of States" series at the modest price of ten dollars each. Not content with reproducing old subjects, entirely new ones are being made, a well-known English firm having an American commission in hand during last summer for such a subject, the "earmarks" plainly indicating that it was to be sold as an antique. These remarks do not apply to the beautiful series of historical views printed in blue issued by well-known Boston and Philadelphia houses and manufactured for them by Wedgwoods and Mintons, and retailed for a nominal sum. All of these are good in design, and many are extremely beautiful and highly decorative. We give an illustration of one of these modern plates, finely engraved, well printed on a good sound body, which can be bought anywhere for fifty cents, and of an Albany City Hall plate, poorly engraved and printed in a muddy pink on the commonest C C ware, for which a dealer asked the modest sum of ten dollars! Truly, the rubbish of one generation becomes the treasure of the next.

HISTORY AND POTTERY. It is impossible to overrate the importance of pottery as a textbook to history. It has unlocked secrets which, but for its aid, would never have been discovered, or at best have been but dimly guessed at. Extinct nations are perpetuated by its aid—their wars, social life, conquest and migration being traced by it as plainly as in a book. The tablets and cylinders of ancient Babylon, impressed with cuneiform characters, disclosed the history of this fallen nation. The pottery of Greece and of Rome shows exactly how far these nations pushed their conquests—nay, indicate the very number of the legions who participated in the fray. From the tombs of Egypt we learn of customs anterior to the time of the Persian Cambyses—six hundred years before our own era began.

MODERN PLATE.

In South America pottery has made us acquainted with a high state of civilization so remote that in comparison the Incas seem but as the children of yesterday. Pottery was the reporter of antiquity, whose records have remained when its cities have crumbled into dust —whose very site would have remained unknown but for a few pieces of common baked clay.

HITASUKE WARE. Made in the Province of Bizen, Japan, and so called from its resembling a knotted or twisted cord. It was first made toward the close of the sixteenth century. The body is gray stoneware, rudely made, and often ornamented with a few streaks of light red.

HIZEN, Japan. The Province of Hizen contains numerous pottery kilns, the oldest of which is that at Karatsu. The works at Arita, now the most important center of the porcelain industry of Japan, were founded shortly after the Karatsu. The ware made there and at the other Hizen potteries is known as Imari ware, that being the port of shipment. It was in this province that the manufacture of porcelain was introduced into Japan about the year 1513 by Gorodayiu Shonsui, who had visited China for the purpose of studying that branch of trade. In 1592 a potter named Risampei was brought over to Hizen after the Corean War by a general of the army under the command of Prince Nabeshima, and was placed at Taku, where he pursued the trade of porcelain-making, but without much success. He then went to Tanaka-mura, now called Arita, and again made experiments. However, he does not seem to have succeeded until he found a good material at Idsumiyama, which was and is used for making the renowned Arita ware. A native of Imari, in the same province, named Higashi-shima Tokuzayemon, had learned from a Chinaman who visited Nagasaki (about fifty miles distant from Arita) the method of painting with vitreous colors on the glaze, and, with the assistance of another potter, named Gosu Gombie, after many experiments eventually succeeded. In 1645 the export of pieces decorated with colored enamels was commenced—in the first place to a Chinaman named Hachikau, and later to the Dutch. The kind of decoration employed at this

OLD KIKU BOWL.

factory has become its peculiar monopoly, and was made especially for the foreign market, being known in Europe as "Old Japan." During what is known as the late period—1850 to 1870—the Hizen pottery may be summarized as: (1) Ordinary thick white porcelain decorated in colors and gold; (2) fine, transparent porcelain decorated with minute designs in outline, filled in with colors in light washes, or in raised masses or dots, imparting a jeweled effect; (3) eggshell porcelain of great delicacy (its manufacture is said to have been commenced in 1837); (4) crackled porcelain of a cold gray tint, with flowers in colors. The most modern production is what is known as Nagasaki ware, because it is shipped from that port, and consists of vases, tea sets, dishes, etc., elaborately but coarsely decorated in a disagreeable red, a weak blue and a light green. Our illustration is of a bowl of old Kiku ware.

HOANG-TI. The Chinese claim that the art of potting was invented by the Emperor Hoang-ti, B. C. 2668, or, according to another account, by Kouen-on, during this emperor's enlightened and beneficent reign. The emperor as a reward was translated to the upper sphere on the back of a dragon.

HOCHST, near Mayence, Germany. In 1720, Ringler, a workman from Vienna, carried the secret of the manufacture of china to Hochst, and, with the assistance of Geltz, of Frankfort, added china to the existing manufacture of faïence. The faïences of Hochst, much prized by amateurs, show the perfection required in the manufacture of porcelain, which it frequently reproduces in form and even in decoration. Like the porcelain, they are marked with a wheel with six spokes, taken from the coat-of-arms of the archbishop of Mayence, patron of the manufactory. This wheel figures alone or accompanied by the initial of the decorator. The most able of the latter seems to have been Zeschinger, who signed his full name or simply a "Z." Exceedingly beautiful works were produced, more especially in groups, those by Melchoir being most highly prized. When he left the manufactory he was succeeded by Reis, and the so-called "thick head" period commenced. All the figures modeled by him have disproportionately large heads, and are consequently of much less value than those of Melchoir. Christian Gottlieb Kuntz, a painter employed there, was celebrated for his beautiful blue and red enamel. Great secrecy was observed in all the departments, and the composition of the beautiful violet-red color for which this china is celebrated perished with one of the painters. In 1794 General Custine destroyed the manufactory, but the molds and the models that were managed to be saved were bought by a

potter named Dahl, who in the first years of the century established, not far from the place where the original manufactory had been situated, another, whose inferior products still bore as mark the wheel of the Archbishop of Mayence, accompanied by a "D." Dahl seems to have painted more especially on hard enamel; some faïences decorated in blue of a soft tone and outlined in manganese, with flowers, foliage and birds, bear his mark. M 118.

HOEHR, GRÈS DE. (See Grenzhausen.)

HOFDICK, DAMIS. Master potter at Delft. In 1705 he was the proprietor of the fabrique of the sign of "The Star." He has left a number of faïences that are quite fine, with open-work borders, decorated in greenish camaieu blue, and some polychrome pieces, principally parroquets, ducks, etc. He marked "H."

HOLCROFT, the author of "The Road to Ruin," was at one time a hawker of pottery.

HOLDCROFT, JOSEPH, Longton. Manufacturer of majolica of an imitative rather than original description, though the potting is good. M 119.

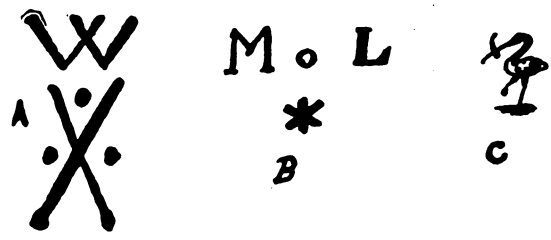
HOLDSHIP, JOSIAH, was one of the original partners in the Worcester Works, as was also

HOLDSHIP, RICHARD, owning between them about one-fourth of the capital of the company. Richard seems to have claimed to have discovered the art of printing on pottery. (See R. Hancock.) In 1751 he became the lessee of the works, but became bankrupt and sold his shares for five shillings, carrying the secret of printing to the Derby China Works. Marryatt states that he went to Caughley to introduce printing there.

HOLITSCH, Hungary. A manufactory of faïences with stanniferous enamel, that produced side by side with work of original character faïence copied servilely from porcelain or German faïence. The coloring of Holitsch faïence is fresh and decided; many of the pieces are rather coarse imitations of Strasburg faïence; others of yellow background with medallions in the body color are evidently an inspiration from the faïences of Montpellier. There are also some plates, vases, etc., attributed to Holitsch that are decorated in exact imitation of the faïence of Castelli. These faïences are marked "H. F."

HOLLAND. The chief interest in the pottery of Holland centers in Delft (which see), but during the Seven Years' War the Dutch availed themselves of the almost ruined state of the industry in Germany to establish several manufactories of hard porcelain. The first of these was established at Weesp, near Amsterdam, in 1764,

by Count von Gronsveld, with the assistance of workmen from Saxony. It existed, however, for only seven years. In 1772 it was reopened by the Pastor de Moll at Loosdrecht, near Utrecht, and porcelain celebrated for its beauty and fineness was made for about ten years, when the manufacture was transferred to Amstel; but it failed for want of encouragement. The original mark was a "W" in blue under the glaze, or in gold, and the Meissen crossed swords (A). When the manufactory was transferred to Amstel the mark B was used, standing for *"Manufactur oude Loosdrecht"*—manufacture of old Loosdrecht. At The Hague, Lynker, a German, established in 1778 a porcelain manufactory on the Canal, which was afterward transferred to the "Nieuwe Mol" Street. Political events of the period from 1785 to 1793 brought the industry to a standstill, which



also labored under the disadvantage of being restricted to home consumption, the importation of china into other countries having manufactories being prohibited. The porcelain of Holland varies little from that of Germany, the paste being fine and the decoration generally well executed. The mark of The Hague porcelain is a stork with a fish in its mouth (C). There were other manufactories of an unimportant character at Arnheim and one or two other places. To-day the Holland potters are much in evidence. Messrs. Thooft & Labouchere have given us their charming reproductions of old Delft, an illustration of which appears in the article on Delft, through the courtesy of Messrs. Tyndale, Mitchell & Co., and have once more made the old city a pottery center. What they have done for Delft the Rosenburg factory has done for The Hague. The old house of Petrus Regout & Co. (*q. v.*), the largest pottery but one in Europe, has just absorbed one of its competitors, the porcelain factory of Louis Regout & Co. This house and the Société Ceramique at Wyk, Maastricht, make the old town of Maastricht quite an important center.

HOLLINS, MICHAEL DAINTRY. Was the fourth son of Mr.

Thomas Hollins, of Manchester, and was born in 1814. It was intended that he should join the medical profession, but after going through the usual course of study, and successfully passing his examinations, he became a member of the Royal College of Surgeons. Mr. Hollins, however, did not practise as a surgeon, but in 1839 joined the firm of Minton & Co., Stoke-upon-Trent, being a nephew by marriage of the late Herbert Minton. Here he had supervision of the manufacturing department, Mr. Minton exercising a general direction over the concern. In 1849 Mr. Colin Minton Campbell became a partner, and in 1858 Herbert Minton died, the business being carried on by Mr. Hollins and Mr. Campbell until 1868, when the partnership was dissolved, the agreement being that he should continue the manufacture of encaustic and other tiles, and Mr. Campbell that of the other branches. The assistance given by Mr. Hollins to Herbert Minton in his production of encaustic tiles has never been fully acknowledged, but that his abilities wonderfully assisted in the experiments and development of the process there can be no doubt. It seems, at any rate, to have been tentatively acknowledged by Herbert Minton, for when the manufacture of tiles was fairly commenced it was under the distinctive style of Minton, Hollins & Co. In the lawsuit that followed the dissolution of partnership the highest courts upheld Mr. Hollins in his claims to the sole right of stamping these encaustic tiles with the name Minton, and gave him possession of all orders addressed to Minton & Co. if they contained on the address any reference to tiles. As soon as new premises could be built Mr. Hollins transferred the manufacture of tiles to the new works at Cliff Bank, where the manufacture of the world-famed Minton tiles has been successfully carried on under the style of Minton, Hollins & Co. Mr. Hollins had always the highest reputation as an employer of labor; his workpeople were devoted to him, and his knowledge as a doctor was always at their disposal, though he, of course, did not prescribe for them; but, quick to note their ailments, his sound advice was often of the utmost benefit. He took a great interest in local affairs, was elected to many important public offices, and was intimately associated with the volunteer movement from 1859, when he was the first captain of the Stoke Company, until as colonel-commandant of the North Staffordshire Regiment in 1889 the Government regulations in regard to age called for his retirement. He died early in February, 1898, at the ripe age of eighty-two.

HOLLINS, WARBURTON & Co. Proprietors of the New Hall China Works at Hanley, where the first hard porcelain made in Staffordshire was manufactured. It is interesting on account of its connec-

tion with Richard Champion more than any merit in its production. (See New Hall.)

HOLLINS, T. & J., and HOLLINS, S. Were both manufacturers in Staffordshire of the school of Elijah Mayer, toward the close of the last century.

HOLMOS. A Greek cup for wine.

HOMER. Cowper has translated a poem by Homer addressed to certain potters, who, busied in baking their wares, seeing him approach, called to him and promised him a present of their commodity if he would sing to them, when he sang as follows:

"Pay me my price, potters! and I will sing.
Attend, O Pallas! and with lifted arm
Protect their oven; let the cups and all
The sacred vessels blacken well, and, baked
With good success, yield them both fair renown
And profit, whether in the market sold
Or streets, and let no strife ensue between us.
But O ye potters! if with shameless front
Ye falsify your promise, then I leave
No mischief uninvoked to avenge the wrong.
Come, Syntrips, Smaragdus, Sabactes, come!
And Asbestus. Nor let your direst dread
Omadamus delay! Fire seize your house!
May neither house nor vestibule escape!
May ye lament to see confusion mar
And mingle the whole labor of your hands!
And may a sound fill all your ovens
Such as of a horse grinding his provender,
While all your pots and flagons bounce within.
Come hither, also, daughter of the Sun,
Circe, the sorcerer, and with thy drugs
Poison themselves and all that they have made!
Come also Chiron, with thy numerous troop
Of Centaurs, as well those who died beneath
The club of Hercules as who escaped,
And stamp their crockery to dust! Down fall
Their chimney! Let them see it with their eyes,
And howl to see the ruins of their art.
While I rejoice; and if a potter stoop
To peep into his furnace, may the fire
Flash in his face and scorch it, that all men
Observe thenceforth equity and good faith."

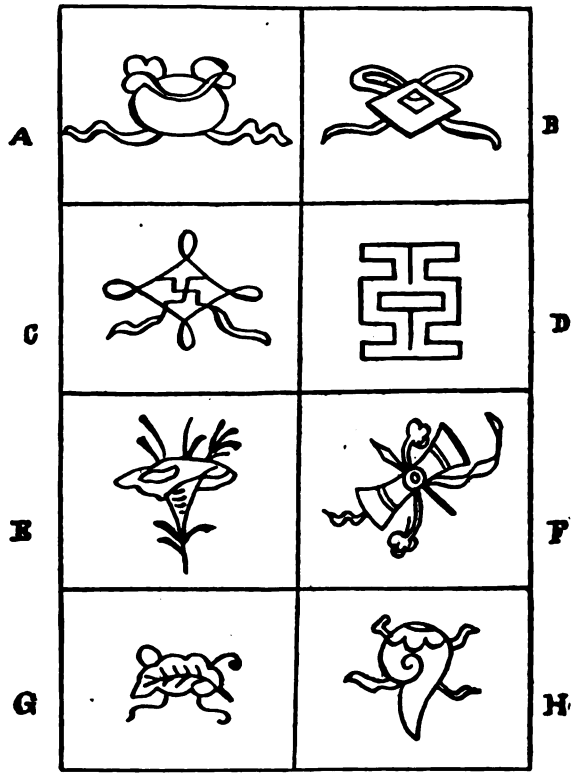
Syntrips and Smaragdus express the breaking of the earth to pieces. Asbestus is the fire that cannot be moderated. Sabactes characterizes the misfortunes of workmen whose work is destroyed, and Omadamus is the destructive force which nothing can resist.

HOMER, W. H. (See New England Pottery Co.)

HONAN. A province of China where porcelain was first manufactured during the Hom dynasty, between the years B. C. 185 and A. D. 88.

HONORÉ, Paris. The early introduction of lithographic stones as applied to the decoration of porcelain is ascribed to him.

HONORIFIC MARKS. Symbols used by the Chinese signifying for whom the ware was made. There are eight principal ones, and when



to one of these is added a ribbon it signifies that the piece was designed for sacred use. The pearl (A) is the symbol of talent, and the pieces are destined for poets and *literati*. The "sonorous stone" (B) is for judges and magistrates, and was hung above their door

or at the temple gates, to be struck by those seeking admittance. Pieces with this mark were exclusively for the use of judges. The Konei, or tablet of honor (C), is the symbol of office. It was bestowed by the emperor on his noble functionaries, who were required to hold it when discharging the duties of their office and during an audience. The sacred ax (D) is the mark of warriors. The Celosia (E) is the symbol of longevity. The "treasures of writing" (F) are the emblems of the learned, and consist of paper, brush, ink and pumice-stone. The Outang (G) is a leaf, the significance of which is not understood. The meaning of the univalve shell (H) is also unknown. These marks are sometimes on the bottom of the ware, sometimes a component part of the decoration, or appear on the neck of vases so as to constitute the chief ornament.

HOORNE, HENDRICK VAN. Potter of Delft. Established in 1759 at the sign of the "Three Ash-Barrels."

HOPE & CARTER, Burslem. Mr. John Hope, formerly a partner in the firm of Pinder, Bourne & Co., at the dissolution of partnership in 1861 formed a new firm by taking in a Mr. Carter as partner, and under the style of Hope & Carter manufactured earthenware for the English trade at the Fountain Place Works.

HOPKINS & VERNON, Burslem. (See A. J. Wilkinson.)

HOPPESTEIN, JACOB WEMMERS. Master potter. Established at Delft in 1661. He was a pupil of Abraham de Kooge, founder of the fabrique at the sign of the "Moor's Head," to whom he succeeded in 1661. There are quite a number of faïences known of his, decorated in very soft camaieu blue, or in polychrome, of which several are most remarkable, especially those decorated in blue.

HOPPESTEIN, ROCHUS JACOB. Son of the preceding, to whom he succeeded in 1680. He produced, equally, faïences decorated in camaieu blue and in colors enhanced with gold. His mark, which is quite rare, is composed of the Moor's head of the fabrique and his monogram.

HORN BROTHERS, Hornberg. Manufacturers of majolica and stoneware. Established in 1817. Their trademark is a horn half surrounded by a sunburst.

HOROLD. Director of the Dresden factory from 1719. (See Dresden.)

HORADASHITE. The Japanese term for castaways found in the ruins of ancient kilns.

HOTEI. The Japanese god of contentment, represented as a portly and complacent deity.

HOUDAYER, JOHN F., was a partner in the old Trenton, N. J.,

firm of Taylor & Speeler, some time between the years 1860 and 1870.

HOUK, JAN SICKTIS VAN DEN. Potter at Delft, where he directed as foreman several fabriques, among others that of the sign of the "Porcelain Bottle," in which he entered in 1701. Several polychrome pieces of ducks and chickens forming soup-tureens and vegetable dishes, ably executed and very well decorated, bear his initials.

HOUSE OF LORETO. (See Loreto.)

HOXTER. A Furstenberger named Zeiseler, a flower painter, tried to start a manufactory of hard porcelain here in 1770, but was unsuccessful. He was followed by Paul Becker, who had defrauded Ringler of his notes and memoranda, and succeeded in establishing the industry, after having fruitlessly hawked his secret through France, Belgium and Holland. He was bought up by the offer of a pension, and the enterprise came to an end.

HOZAN, BUNZO. A Japanese potter of the present day at Awata, Japan. He is a descendant of the original potters of that place.

HOZEN, ZENGORO. Settled some twenty-eight or thirty year ago at Kutani, Province of Kaga, Japan, and did much toward encouraging and instructing the manufacturers of that place in the method of making and decorating porcelain.

HUBBE BROTHERS, Neuhaldensleben. Manufacturers of porcelain. Established in 1875. M 120.

HUDSON RIVER POTTERY, West Twelfth Street, New York. Founded in 1838, and until 1878 produced only stoneware and glazed earthenware. Under the direction of William A. Macquoid & Co. terra-cotta in antique forms for decorative purposes was made.

HUET, BERNARD, and HUET, JEAN LOUIS, were figure modelers at Orleans in 1753.

HULME, THOMAS. (See A. J. Wilkinson.)

HULME & BOOTH. (See A. J. Wilkinson.)

HUMBLE, GREEN & Co. (See Leeds.)

HUNGARY. Nothing, we believe, has as yet been published on the history of the ancient faïence industry in Hungary, and if we except the manufactories of Holitsch and Tata, whose products can be identified, we know nothing of the other fabriques, from which, however, there issued numerous faïences that from all accounts well deserve to be collected and studied with care. Specially noteworthy are the plaques, skilfully drawn in manganese and freshly painted, reproducing familiar subjects, personages, soldiers in rich costume, etc., and which are even to-day frequently found in country houses. They often bear legends and almost always dates inscribed in cipher

of peculiar form that does not seem to have varied much, and which alone suffices to make them recognized. The Museum of Sèvres possesses several of these interesting faïences.

HURCH, PIETER VAN. Master potter. Established at Delft in 1696 at the sign of "Timon" (Inde Dessel). His fabrique doubtless had a brief existence, for there is but one piece known that can be attributed to him, and it is marked in full "IN DE DELF SEVINKEL, I. D."—in the Magazine of Delft, I(nde) D(essel).

HÜRTEN, CHARLES FERDINAND. Born at Cologne, 1818, and studied in the school of art there. In 1836 he went to Paris, and soon obtained vogue as a successful flower painter, executing some commissions for Sèvres. In 1859 he was brought to England by Messrs. W. T. Copeland & Sons and continued with them until 1897, a long and honorable service. That his work should continue so long in popular favor is an evidence of its worth. During this long term of years and at the various exhibitions in which Messrs. Copeland participated his work was a conspicuous feature, for Mr. Hürten was by no means an ordinary china flower-painter working to a set pattern, for every one of his productions was carefully thought out and painted with the most loving care and with a certain boldness withal that gave them a charming significance. His taste, his sense of proportion and the brilliancy of his palette placed him easily in the first rank. A vase five feet high exhibited at the London Exhibition of 1862 was purchased by the British Government, and there are a number of specimens of his work in the South Kensington Museum. He had also a certain reputation as a painter of fans, and was selected by the Duke of Devonshire to execute an order for twelve screens on black satin which now adorn the drawing-room at Chatsworth. Mr. Hürten had an imposing presence and a genial disposition which made him a host of friends. He died in London in 1900.

HUSSL, J. ANT., Schwaz. Manufacturer of majolica and ornamental pieces in the Oriental and Renaissance style. Established in 1801. M 121.

HUSTIN. (See Bordeaux.)

HUTSCHENREUTHER, C. M., Hohenberg. Established in 1814, and now employs about four hundred workmen. He makes principally china for decorators, and often employs the Royal Vienna mark in blue underglaze. M 122.

HYDREA. A Greek water pitcher with two side handles and one larger one.

HYLTON POTTERY, near Sunderland, was established by J. Phillips about 1762.

I

IBERIAN PENINSULA. (See Hispano-Moresque and Spain.)

IBIS MUMMY POTS. Vessels of early Egyptian manufacture, made of red clay, and used for holding the embalmed body of the sacred bird. They are usually of a conical shape, with a slightly convex lid.

ICHI-NIN, or Sahei. The manufacture of the Japanese Raku ware has been continued from the middle of the sixteenth century in a direct line of eleven generations. Ichi-nin is the potter of the fourth generation.

ICHINOSE, Japan. There is a kiln here, the products of which are classed as Arita or Hizen ware.

IDSUMI-YAMA. A hill near Arita where are to be found nearly all the materials necessary for making porcelain. (See Arita.)

IDUMO WARE. Made in the village of Matsuije, Province of Idsumo. The kiln was established by Gombei, a potter of Hagi, about 1658. Using the Hagi clay, the products had much the character of the true Hagi ware. In the beginning of this century a skilful manufacturer of the name of Hanruko received orders from the prince of the province to make imitations of the ancient ware, in which he was very successful. The ware from this kiln, which is now known as Rakuzan-yama, consists of tea utensils and ware for general use, preserving the earlier characteristics.

IGA WARE. This ware, which is called Ko-Iga, is made at Mambashira, Province of Iga, Japan. Small articles of a pale gray stoneware, covered with a greenish glaze, and red ware, the upper part and inside glazed with brown and mottled with green, are the leading characteristics.

IGANOMURA. (See Awaji.)

IGARASHI, JIHEI. (See Takatori.)

IKEDA, YASUJIRO. At Mikawaji, six miles from Arita, Japan, this potter in 1837 made a very thin, paper-like and glossy translucent porcelain known as eggshell. Small pieces only were made, turned on the potter's wheel. Of late years it has been painted with enamel of various colors and largely exported. The material comes from the island of Amakusa, or Goto, and is softer and tougher than that from Idsumi-yama.

IMADO WARE. At Imado-Machi, in the northern part of Tokio,

Japan, are a number of small kilns where an inferior kind of earthenware for domestic use is made. Mottled ware, made by mixing red and black or black and white clays, is also made.

IMAMURA, SANNOJO. Established about 1655 the manufacture of Herado, or Herato, ware. (See Hirado.)

IMARI WARE. The name given to ware made in the Province of Hizen on account of its being exported from that port.

IMOLA, Italy. Pottery of an old date has been ascribed to this place, but nothing of a definite character seems to be known about it.

IMPERATRICE, L'. *Manufactur de S. M.* (See Dagoty.)

INAKIMURA. (See Inu-yama.)

INDIA. There is more of supposition than actual knowledge respecting the porcelain of India. Chardin, an authority on Persian porcelain, states that no porcelain was made in India, and that all used there came either from China or Persia. The Abbé Raynal, on the contrary, alluding to the house occupied by the Banians, at Surat, speaks of porcelain plaques inlaid in the ceiling. Marryatt gives extracts from several inventories in which Indian and Chinese porcelains are concurrently mentioned, and states: "Indian pottery is of fine quality, well made and of good form, and may easily be distinguished as really Hindoo from its national character. Hindoo deities are depicted upon it, as well as Buddhist figures." It is hardly possible to believe that with the advancement we know they possessed in the other branches of art they should have been ignorant on this especial one, or that their knowledge should have been borrowed from either China or Persia. Indian figure painting on porcelain, for instance, is much superior to that of China. Specimens preserved of Indian pottery entitle the Hindoo potters to a high rank, and prove that at a very early date they were acquainted with the processes of enameling and glazing. The present salt-glazed earthenware, with its beautiful greens, blues and turquoises, is so intimately allied with the old Indian ware as to seem its legitimate successor.

INDIAN PORCELAIN. Japanese and Chinese porcelain, so called from its having been received via the East Indies.

INDIANS. (See North American Indians.)

INGLIS, THOMAS. Born in Ayrshire, Scotland, in 1819. He came to America in 1844, and, being interested in Egyptian and Assyrian ceramics he began experimenting at his summer home, Manchester-by-the-Sea, and eventually produced some most excellent pieces, the glazes in many cases being quite remarkable. A fine

collection of his work is in the Metropolitan Museum of Art. None of this pottery was produced for commercial purposes.

INTERNATIONAL POTTERY COMPANY, Trenton, N. J. This pottery was organized in 1879, the incorporators being James Moses, John Moses, Edward Clark and Thomas Clark. In September of the same year John W. Burgess, William Burgess and John A. Campbell bought out the stock of the above-named, and became the proprietors of the International Pottery Company. From that date up to the present year the concern has been run under the corporate name, stamping their goods with the trademark "Burgess & Campbell." In 1895 Mr. John Campbell withdrew from the firm, and Mr. E. C. Williamson was elected as treasurer. The present officers are: William Burgess, president; E. C. Williamson, treasurer, and I. H. Nichols, secretary. The International Pottery Company make a sound and durable earthenware body, and, we believe, were the first American potters to successfully introduce flowing blue decorations. These decorations have been mostly of an original character, and the International may fairly be credited with having done all in its power to uphold all that was most commendable in American pottery. Mr. William Burgess was born in Brooklyn in 1857, his father, John Burgess, being the founder of the firm of Burgess & Goddard. Educated as a physician, he, unfortunately, when at Bellevue Hospital, contracted blood-poisoning, which so impaired his health that he was reluctantly compelled to give up the medical course. Upon his recovery he, as stated above, became interested in the International Pottery Company, and during President Harrison's administration was appointed to the North Staffordshire Consulate at Tunstall, serving the Government and looking after the interests of American potters in the most acceptable manner. The appointment of such a comparatively young man—he was then thirty-four years of age—was a fitting compliment to his acumen as a business man and his integrity as a citizen. Upon the completion of his term as consul he again took an active interest in the International Pottery Company, and remains an important factor in that concern. M 123.

INSOUFFLAGE is the blowing on of glaze by means of compressed air; the jet of glaze falls upon the porcelain standing on a revolving wheel, and it leaves on the surface of the ware only the finest film of glaze.

INU-YAMA WARE. "This pottery is situated in the village of Inakimura, near the Castle of Inu-yama, in the County of Neiva, Province of Owari, but the date of its foundation is unknown. It

is, however, certain that in 1810 there was made here an imitation of Chinese porcelain (so-called Ako-ye), decorated with red ocher and also cobalt painting. The trade still flourishes."

IPSEN, Mme., Copenhagen. Copies of Greek vases, most artistically executed, perfect as to form and ornamentation, together with statuettes in terra-cotta, beautifully modeled, are produced by Mme. Ipsen. This Danish terra-cotta from its simple nobility seems the perfect realization of a noble and artistic conception.

IRELAND. The only potteries we have any information about in Ireland are the Belleek works, at Belleek (*q. v.*), County Fermanagh; the James R. Burns and Ulster Pottery at Coalisland; S. Burns & Co., Creenagh; Corr & McNally, Coalisland, both earthenware manufacturers; R. J. Beatty, David Burns, Robert Burns and Samuel Burns, all earthenware manufacturers at Killyman, County Moy.

IRONSTONE. A name applied by Mason to a hard earthenware body patented by him in 1813. (See Mason.)

ISLE D'ELLE. (See Elle, Island of.)

ISLE ST. DENIS, Paris. A hard-porcelain manufactory was established here in 1778. Bisque busts were one of the products.

ISPAHAN, Persia. It is stated in "Ajaib el Boldan," a work written in the thirteenth century, that "especially is Ispahan celebrated for the skill of her potters, who make vases that can hold four pints of water, and which weigh no more than four miscals (12½ dwt.)." Chardin also quotes an old story current in his day to the following effect: "The potters of Yezd once sent as a challenge to the potters of Ispahan a porcelain vase which held twelve pounds of water and only weighed one miscal. The potters of Ispahan sent to Yezd in return a vase of the same size and shape, which only held one miscal of water and weighed twelve pounds."

ISHI-YAKI. The Japanese name for a kind of stoneware.

ISLETTES, LES, Meuse. It is through error that this manufactory is designated by the name of Fabrique des Islettes. In reality it was situated at Bois d'Epense (Marne), a contiguous hamlet to the village of Les Islettes, from which it is only separated by the Bresme, a small stream that forms the boundary of the Marne and of the Meuse; but as most of the workmen employed in the pottery lived at Les Islettes, and several of the outbuildings of the manufactory were within its territory, the custom prevailed of giving the products the name of faïence of Les Islettes. However, on the list of potteries of the end of the last century the fabrique is mentioned under the name of Bois d'Epense. It is only since 1785,

under François Bernard, successor of his father, that the fabrique of Les Islettes, which had already existed for a long time, began to attain a certain importance, and especially under the direction of his son, Jacques Henri, that its products acquired the special brilliance and clearness of tone that make them everywhere recognizable and constitute their chief originality. Cassius purple, pure cobalt, bright yellow and copper green nearly always dominate—drawn, and in many cases one may say underlined, by strokes of brown or black strongly accented. The subjects decorating Les Islettes faïences are of greatest variety. They are principally of flowers, forming large bouquets tied with a pink ribbon or gathered in a basket; of birds, especially cocks, and of Chinese landscapes. But it is particularly the figure subjects, familiar or lively scenes, military sketches, types of soldiers of the Grand Army, episodes in the life of Napoleon I.—among others the well-known scene, *"On ne passe pas!"*—etc., that have made the faïences of Les Islettes so popular, not only in Lorraine and in Champagne, but in more distant countries, where it remained in vogue the first quarter of our century. The faïences of Les Islettes are not signed. There are, however, two plates mentioned as bearing the mark "Bernard au Bois d'Epense," but we have never seen them.

ISLEWORTH. A small pottery was founded here on Railshead Creek by Joseph Shove, of Worcester, about the year 1760. Another and later proprietor of the works was Goulding. Fine terra-cotta vases of classical shapes with figures in relief were made here. Pieces marked "S. & G." are ascribed to Isleworth, though it is not known that Shove and Goulding were ever in partnership.

ITALIENNE, L'. A manufactory, so called, was founded at Goincourt (Oise) about 1795. There was principally faïence made here that was decorated by dots with nothing artistic about it, but that merits mention because of the singularity of the process of decoration. They are marked in the mold, stamped in the clay, "l'Italienne."

ITALY. The pottery of Etruria has already received mention, and the Roman Samian ware will be noticed later. Its more recent history may be said to start with Luca della Robbia, who is generally credited, although on slender grounds, with the discovery of tin enamel. In the article on Germany we have already seen that it was probably known there as early as 1283, whilst the Moors in Spain undoubtedly employed it about the same period. Possibly it was known to the Italian potters, and that Luca did but borrow it from them, although later he undoubtedly improved it. Painted majolica

was probably first brought into Italy from the Balearic Islands early in the twelfth century, and we are told that it was the custom at Pisa with the warriors returning from the Crusades and stopping at Majorca to bring home this peculiar earthenware, which was then incrusted in the walls and façades of churches as trophies and ornaments. But for two hundred years the Italians did not try to imitate these wares, which they termed majolica, from their place of origin. There already existed in Italy a potting industry of considerable antiquity, and Passeri traces it as far back as 1100, in which the red or brown ware was coated with a thin coating of slip or engobe, lightly fired and then covered with a plumbiferous glaze. Yellow, blue and black only were employed in its decoration, and the lead glaze imparted a special iridescent luster to it. This is what is termed "mezzo majolica." Before Luca della Robbia brought into use, if he did not actually rediscover, the tin enamel, metallic lusters had been used. What he did undoubtedly accomplish was to so considerably improve it as to bring it into general use. The first work to which he applied it was a bas-relief of the Resurrection, made about the year 1440 and still standing in the Cathedral of Florence. To him must be assigned the credit of paving the way to the revival which culminated in the products of Gubbio. He was succeeded by his nephew, Andrea, who continued the work, though not on such refined lines. The impetus Italian art thus received was kept up through the ducal houses, and the art gradually spread throughout Italy. The first home of majolica is variously ascribed to Caffaggiolo, Faenza and Pesaro. In describing the widespread manufacture of majolica in Italy, Mr. Robinson writes: "There were then in the flourishing days of the art, first, the private manufactories (botegas), producing in the usual industrial conditions, and generally aggregated in certain great centers of manufacture; secondly, the manufactories attached to the courts, castles or villas of nobles and

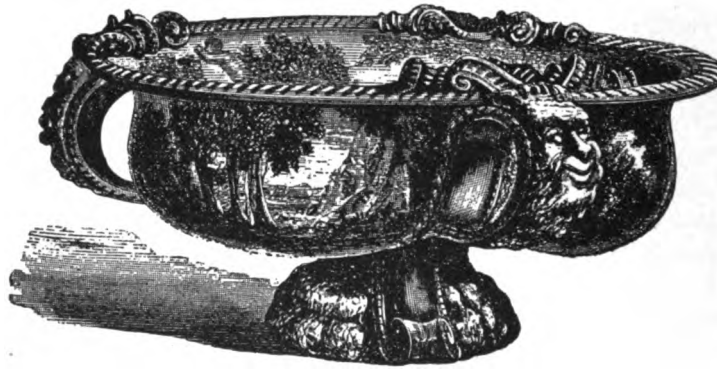
LUCA DELLA ROBBIA.

princes, producing works of special value for their patrons; and thirdly, artists unattached —*i. e.*, working on their own account, and frequently changing their places of abode. The manufacturers, as a rule, repeated in gross the regular patterns which were their respective copyrights. An infinity of unique designs was executed on all hands by the painters, ho worked on their own account or for noble patrons, so that in fact majolica, not less from the high artistic excellence displayed than from the fact of this frequent independence of the usual commercial conditions, may be justly regarded as a development of fine art." During the first period the decoration was painted on the unfired enamel, and, as this absorbed the color very rapidly, a broad and decorative treatment was necessary; but as both the enamel and colors fused at the same time, making one harmonious whole, very rich and vigorous effects were produced. Later the painting was applied on the fired enamel, and more minute details were possible. The

TERRA-COTTA ENAMEL BY LUCA DELLA ROBBIA.

TAZZA OF DERUTA WITH HEAD OF "ROME."

ground itself furnished excellent high lights, which could be attained by simply scratching away the color, and it was possible to trace the finest lines and most minute details on its hard and polished surface. By the early method pieces of the greatest decorative beauty were produced with simple color effects in blue and a yellow metallic luster—generally figure subjects, often surrounded with borders of medieval simplicity. Faenza is said to have given the name of faïence to earthenware, and was celebrated for the beauty of its borders and the richness and luster of its glaze. During the first quarter of the sixteenth century its productions were brought to the highest perfection. Its earliest dated piece is 1475. At Caffaggiolo, which may have been the private botega of the Medici family, the dated pieces commence with 1507. But few lustered pieces were made here. Its products were similar to those of Faenza, with



CISTERN, MAJOLICA-WARE OF URBINO. CIRCA, 1540.

which they are often confounded. The celebrated plate entitled "Raffael and the Fornarina" (*q.v.*) was painted here. Deruta is supposed to have been founded by a pupil of Luca della Robbia and produced an infinity of wares of an admirable style of design, though somewhat cold and monotonous. Castel-Durante was in existence in 1361. The general characteristics were freedom of painting, harmonious colors broadly laid on, but a little pale. Toward the second half of the sixteenth century the grotesques and trophies assumed a lustered orange tint, crude and disagreeable to the eye. Urbino was perhaps the most celebrated of the factories producing fine majolica. A distinct style of art as applied to majolica sprang up at Castel-Durante and Urbino, historical compositions entirely covering the whole of the plate, whilst ornamental decoration was a secondary feature.

The painters relied on engravings for the motives for their compositions, transposing figures and groups so as to form fresh subjects. The copying of Raffael's designs led to this majolica being called Raffael ware. Urbino produced a family of artists without rival as ceramists, the Fontanas, and Francesco Xanto. Early in the seventeenth century the art received its death-blow in the Duchy of Urbino by the extinction of the reigning family. Pesaro, also in the Duchy of Urbino, made large vases and other ornamental pieces about the middle of the sixteenth century. By far the most important seat of the industry was Gubbio, made illustrious by Maestro Giorgio Andreoli. His earliest dated piece is 1518. Mons Jacquemart says: "The oldest ornamental pieces of Gubbio are generally of the style a candelieri,' combined with the heads of winged cherubs. This decoration, pretty bright in tone, is detached from a pale blue ground worked up with a brush. Later appears the bright ground laid on by the lathe and decorated by taking out. Trophies with mottoes surrounding busts appear from 1519 in the middle of these varied styles, as well as open cups with low feet, the whole surface occupied by the bust of a man or a woman. Of vigorous drawing, modeled in polychrome, colors dexterously laid on, these plates, sometimes heightened with metallic colors, sometimes soft and sober in tone, are always elevated in tone. The men are heroes of the epoch, scarcely veiled under the name and attributes of the gods, or heroes of antiquity. As to the women, their poetic denomination, coupled with the epithet 'bella,' sufficiently explains they are the ladies whose gallant artifices Garzoni fears for the youths of his time." Giorgio had almost a monopoly of some of the finer lusters, and other fabriques sent their wares to him to be lustered. Other cities, such as Forli, Fabriano and Ferrara, also produced majolica, but their botegas were not important. Toward the end of the sixteenth century the manufacture began to decline, and although

GUBBIO CUP, BY MAESTRO GIORGIO.

continued during the seventeenth and eighteenth centuries, it is to France we must look for something equal to the Italian product of the sixteenth century. There the art was carried by Italian artists, and on the new soil took root and flourished. Sgraffito or graffito (incised ware) was largely produced in Italy, the process being at its best about the middle of the fifteenth century, and was chiefly adopted in the North. The enameled faïence did not succeed in entirely dethroning it, for we find sgraffito of the sixteenth century, and there was an amateur of Pavia who continued the fabrication

GIORGIO TAZZA.

to the end of the seventeenth century. It was Italy which led the way in Europe in the manufacture of china—first at Venice in 1519, at Ferrara in 1575, although no specimens are known, and the famous Medici porcelain of 1580, though it was 150 years later before its manufacture was resumed. It was in 1719 at Venice that Vezzi, a goldsmith, resumed its manufacture, but owing to the clay having to be brought from Saxony the works were after the death of Vezzi in 1740 allowed to decay. Other attempts were made in 1738, 1762 and 1765, the latter under the direction of Cozzi, who seems to have

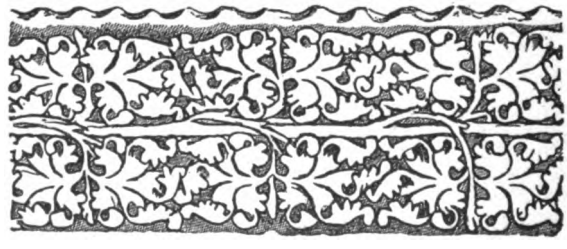
done a prosperous business until 1812, when the factory came to an end. In 1735 the Marchese Carlo Ginori (*q. v.*) started the manufactory at Doccia, and three years afterward the most interesting and important china works in Italy was started by the King of Naples —that of Capo di Monte. When he was called to the throne of Spain he determined to take his china works with him. In 1752 the establishment of Le Nove was founded by Pasquale Antonibon, where was also produced majolica and terraglia, a mixed composition of pottery and porcelain. The china made at all these places was soft paste, the only hard-paste factory in Italy being that of Vineuf, near Turin, which began work about the end of the last century.

CUP OF MAJOLICA. SGRAFFITO.

To-day ceramics in Italy are in a transitory stage, but there is, to its honor be it spoken, an earnest attempt being made by its manufacturers to combine use with beauty, than which there is no higher standard. The house of Cantagalli, whose name, being interpreted, is "Crowing Cock," has been established for about a century as makers of common earthenware stoves, and it was not until 1878 that they branched out into decorative pottery. Their greatest success is obtained with figures in high relief after the manner of Luca della Robbia, and fifteenth-century vases and plates with metallic lusters after the manner of Maestro Giorgio. The luster is obtained by means of salts of copper and silver reduced or decomposed in the

SUBJECT IN THE INTERIOR OF CUP ON PRECEDING PAGE.

fumes of green wood. Their better known wares, which are cheap and of excellent shape, are the real old majolica — an earthenware body covered with a tin enamel and decorated on the raw glaze. These are not all replicas, and many new and original shapes and decorations are produced. Torelli, a small Florentine potter, who at one time showed promise of originality, has lapsed into an imitator of Cantagalli, though his white enameled figures of children, cupids, etc., are very clever. Bardi, of Montelupo, makes imitations of the old Montelupo ware, with a shining brown ground on which are raised figures of different colors. Antibone de Nove, of Bassano, shows real artistic feeling, with a disposition to cling to old traditions rather than to originate. Tuscany and the Neapolitan provinces have a large number of men working in a very small way, but often turning out excellent work. Among these may be mentioned Mario Salvini, a nephew of the great actor. The Castellanis, of Rome, are perhaps the most artistic of all modern potters. Richard, of Milan, whose works have recently been fused with those of Ginori, has rendered distin-



BORDER IN THE INTERIOR OF CUP ON PRECEDING PAGE.

guished services to ceramic art, though his work is not so national in its character as that of some of his contemporaries. The Doccia factory of Ginori turns out every conceivable article in china and earthenware, and of the most divergent character. Salvini & Co. and Jafet Torelli are successfully reproducing old majolica. Raffaelle Passarin,

of Bassano, does not confine himself to reproductions, but issues some excellent original works in underglaze colors. Italy largely produces

PLAQUE BY PASSARIN.

earthenware for domestic purposes, and there are in the Province of Pisa alone three hundred kilns in operation.

IVICA, in the Balearic Islands, is alluded to by Vargas, who says: "It is much to be regretted that Ivica has ceased to make her famous vases of faïence, destined for exportation as well as for local consumption." He gives no information of their nature, and nothing more seems to be known of them.

J

JACKFIELD, Salop. Jewett states that some years ago a coalpit at Jackfield, which was known not to have been opened for two centuries, was opened, and a small mug of brown earthenware was found, bearing the date 1634. John Thursfield had works there about 1713, and he was succeeded in 1751 by his son Maurice. A white stoneware was made, incised with flowers and ornaments. Dutch tiles were also produced. Maurice Thursfield made here a superior red body with a rich black glaze. Sometimes it was painted in oil colors with groups of flowers, etc.—rarely enamels. Maurice Thursfield died in America, where he had extensive business connections, the goods being shipped down the Severn to the Bristol Channel. It was at these works that John Rose, in conjunction with a Mr. Blakeway, began making china. On the same site are now the extensive tile works of Craven, Dunnill & Co., who succeeded Hargreaves & Craven, who made plain tiles by the clay-dust process and encaustic tiles from plastic clay. The industry at Jackfield originated with a Mr. Peter Stephan, who also made blue-printed earthenware. Craven, Dunnill & Co. make a large quantity of tiles, both plain and encaustic. Any profit over ten per cent. made by the firm is equally divided between them and the workpeople.

JACKSON, G., Rheinsburg. Manufacturer of china. Established 1815. M 124.

JACOBI, ADLER & Co., Grunstadt. China. Established 1874. M 125.

JACQUEMART, A. A French writer on ceramics, whose "Histoire de la Ceramique" is recognized as a thoughtful and intelligent treatise on the whole range of ceramics, though freely criticised as far as the Oriental portion is concerned. He died in 1875.

JACQUELAINE OF BAVARIA. Her name is associated with the making of stoneware by a curious tradition. Her life seems to have been a stormy one, if not of intrigue, and her fortune at the mercy of any one who coveted it. John of Bavaria obtained it by conquest and bribery, and his death no sooner restored it to her than it was wrested from her by the Duke of Burgundy, and finally fell into the hands of Philip *the Good*, who took it as the price of her husband's life. She died in 1436 at the age of thirty-six. Three years earlier she had retired to the Castle of Teylingen and busied herself

with the superintendence of the stoneware works, fashioning vessels, it is said, with her own hands. We are told that after they were made they were thrown into the Rhine, as mementos of her imprisonment, or "that they might in after-ages be deemed works of art." Unfortunately, the pieces that have been found have nothing to so commend them. They are of quite plain stoneware. But her beauty and the romance of her life have thrown a halo of romance around them, and so let us handle with tender touch the "Vrouw Jacoba's Kannetjes."

JACQUES & JULLIEN. In 1763, Jullien, a decorator at Sceaux, formed a partnership with C. S. Jacques, a sculptor and modeler. They also conducted the works at Mennecy-Villeroy. They removed to Bourg-la-Reine in 1773, and continued the manufacture of soft porcelain. Jullien died in 1774, and was succeeded by his son, who sold out his share of the business to Jacques. When Jacques died in 1799 his son continued the business. Later, fine white faïence was made.

JANSEN, ALDERMAN. The process of transfer printing applied to enameled objects, and which suggested its use on pottery, was first employed by Alderman Jansen at Battersea.

JANS, VAN DER MEER, ARIJ. Faïence maker at Delft in 1671. That he was an artist of talent is proved by some pieces with Chinese decoration of lambrequins and figures in pale camaieu blue that bear his mark—"A. J."

JAPAN. Comparatively speaking, we knew nothing of Japanese art until the Paris Exhibition of 1867, the collection of goods then exhibited being at once a delight and a revelation. Japanese writers claim that the making of pottery was practised there anterior to B. C. 660. The followers of a Corean prince, Amano Hiboko, settled in the Province of Onri B. C. 27, where they manufactured a pottery harder than that previously made. In A. D. 724 a native priest named Giyogi, of the Province of Idzumi, introduced the potter's wheel, and it is from this time the art developed. Corea was invaded by the Empress Jingo A. D. 200, and soon afterward several Coreans settled in Japan and made pottery. Coreans likewise established factories in Hizen about the end of the seventh century; the Raku factory at Kioto about 1550; another at Seto about 1590; and later one at Hagi. But none of these had any lasting influence on Japanese art. To this, exception must be taken in favor of the well-known kilns at Satsuma, which are built on the Corean models, the Corean potters forming a distinct colony by

themselves and being forbidden to intermarry with the Japanese. Chinese influence was more strongly felt. Kato Shirozayemon, after a journey to China, settled at Seto, in Owari, and made a glazed stoneware, about 1225. Porcelain was first made in Japan by Gorodayu Shonsui in 1513. He learned the art in China, in which country he spent some time in order to perfect and improve himself. About the fifteenth century the Tea Ceremonies, which had an almost incalculable effect on the ceramic art of Japan, were introduced. Some particulars of these have been given under the heading of "Cha-ro-yu." Porcelain was greatly improved by a Corean potter named Resampea or Risamper, who settled in Arita toward the close

LATE PERIOD OF ARITA PORCELAIN.

of the sixteenth century. In 1799 there were no less than eighteen factories in the neighborhood of Imari. In the latter part of the sixteenth century specimens of Japanese pottery began to arrive in Europe, carried there by those indefatigable traders, the Portuguese. This continued up to 1641, when they were expelled from the island. The most stringent laws were passed forbidding the trading with foreigners under penalty of death. About 1673 a manufacturer of porcelain in Hizen making "Old Japan" carried on a trade with foreign nations in contravention of the law, was discovered and

forced to commit hara-kari. The Dutch were allowed to retain possession of the island of Deshima, and by them the exportation to Europe was continued. The Province of Hizen seems always to have made the best porcelain—probably because the district furnishes the best materials. It was exported from the seaport of Imari, and hence called Imari ware. In late years a commoner class of ware has also been made, which being exported from Nagasaki is also so called. Other important centers are the Province of Owari, formerly called Miaco; the Province of Kaga, Satsuma, and others, which are noticed under their respective headings. The ceramics of Japan are greatly varied, but may be roughly summarized as: (1)

SATSUMA WARE.

common pottery and stoneware ornamented by scoring and glazing the surface, (2) cream-colored earthenware usually with a crackled glaze and painted in delicate colors, and (3) hard porcelain. To the first of these classes belong the wares of Bizen, old Seto, Shigaraki and other small factories, including Raku wares. The principal factories of the second class are Awata, Satsuma, and the recent imitations of the latter at Ota and elsewhere. Among the porcelain the coarsest is that made at Kutani, but the most celebrated fabriques

are in the Province of Hizen, at Seto in Owari, and Kiyomidzu, near Kioto. The decorations are extremely varied, are in accordance with the best principles of decorative art, and stamped with so much individuality that it is impossible to mistake them. In the animal and vegetable kingdoms the Japanese artist finds his inspiration and combinations of lovely colors. In flowers, foliage and birds, so true in form and tender in feeling, and yet withal so bold and graphic, the Japanese has no rival. The chrysanthemum, wisteria, the wild plum flower, the fir and the bamboo are the favorite trees and flowers. The crane, the eagle, the carp, and less frequently the horse and fox, figure largely, whilst the extinct volcano of Fusiyama is very much in evidence. A keen sense of humor is his, though sometimes leading to broad caricature. His ingenuity in designing geometrical and conventional devices is astonishing. Beautiful fret borders and fret diapers abound. On the latter his sense of diversity prevents him using one design only; frequently on one surface there are a dozen, bespeaking an immense wealth of creative power. His method of dividing spaces in unsymmetrical angular parts and filling them with different designs is but another of his original characteristics. If he uses medallions they are generally of different shapes, irregularly disposed on the surface, and as often as not overlapping each other. He can imitate almost anything in pottery, wood with its different grains, ivory, brass, bronze, basket work—anything. He has also, we regret to say, begun to imitate European china. Why, it is difficult to understand.

JAPANESE **FAÏENCE.** This term was constantly used in France for fifty years in the eighteenth century, and was used to denote copies of Saxony china (which in turn was copied from Imari ware), executed on the enamel on faïence, and to distinguish it from the common faïence of Rouen and Nevers. When Meissen abandoned the style of Imari and adopted flowers and scattered bouquets as a decoration, the French faïence makers, continuing to copy the Saxony style, added to the term "in the style of Saxony." The first mention of it dates back to 1754. (See Herbert.)

JARRY. A decorator at Aprey (*q. v.*).

JASPER. A body invented by Josiah Wedgwood. It is composed of sulphate and carbonate of baryta in combination with flint and clay stained with oxide of cobalt. It has the peculiar property of receiving through its whole substance a metallic coloring matter, which no other body, ancient or modern, possesses. The secret of its manufacture was preserved at Etruria for about twelve years,

after which it was produced by a number of Wedgwood's English imitators, at Buen Retiro, and other European manufactories.

JERSEY CITY POTTERY COMPANY, Jersey City, N. J. The Jersey Porcelain and Earthenware Company was incorporated December 10, 1825, but the venture was not a success, and the production ceased

WEDGWOOD JASPER.

within a year or two. In 1829 it was reopened by David and J. Henderson. In 1833 David Henderson organized the American Pottery Company. Here, for the first time in America, printing on white ware was practised. They also made a brown earthenware decorated in reliefs and colored enamels. Daniel Greatbatch, a

clever modeler, was employed, and here he produced his well-known pitcher with hunting scenes in relief and the handle in the shape of a hound. In 1845 a change took place, the proprietorship being vested in William Rhodes, Strong and McGerron, who made white and C. C. ware until 1854. In 1855 they sold out to Rouse, Turner, Duncan and Henry, and a little later Rouse and Turner carried it on alone. Some of their shapes were exceedingly good, both in earthenware and Parian, and were largely used by decorators. The works were pulled down in 1892. No. 1 is an impressed mark, about 1830;

No. 2 is printed; No. 3 impressed, about 1840; No. 4 dates from 1840 to 1845.

JEFFORDS, J. E., & Co., Philadelphia. Manufacturers of earthenware, Rockingham, etc. They produced some highly effective jardinières, both in colored glazes and decorated in colors, but now only make C. C. ware.

JEHAN DE VOLEUR, of Hesdin, France, is credited with a knowledge of stanniferous enamel.

JERONIMO, MAESTRO, toward the end of the fifteenth century, or early in the sixteenth century, had a manufactory of majolica at Forli, Italy. Its productions may be easily confounded with those of Faenza. Forli produced pottery at least as early as 1396.

JET. A red body covered with a blue glaze which produces a brilliant black called jet. It is usually made in teapots, creams, sugars and jugs.

JET ENAMELED. In the old Worcester sale catalogues, china printed on the glaze is so called.

JEWELED PORCELAIN. The process of enriching patterns by the introduction of small pieces of glass in imitation of jewels was, we believe, a Sèvres invention. The English china manufacturers made a more truly ceramic production by substituting enamels for glass. Mr. W. H. Goss considerably improved the process.

JEWS. A decree of Frederic the Great, for the encouragement of his Berlin factory, enacted that no Jew in his dominions should be allowed to marry until he had produced a voucher from the manager that he had purchased and paid for a certain amount of china.

JIHEI, IGARASHI. A Japanese potter of Takatori, 1690.

JOHNSON, T., 1694. His name occurs on a dish with the old English slip decoration.

JOHNSON, DR. S. In Falkner's "History of Chelsea" we find the learned doctor in a new rôle—that of a potter. He conceived the idea that he was capable of improving the manufacture of china, and the factory was placed at his disposal so that he might make his experiments, which resulted in a ludicrous failure. Boswell speaks of his visit to the Derby China Works in 1777, when he complained that the price asked was higher than the same articles would be if made in silver. The learned doctor had evidently a weakness for china—and teapots, for he owned one holding two quarts and another which held more than three quarts.

JOHNSON, REUBEN, & Co., Hanley. (See Furnivals.)

JOHNSON BROTHERS, Hanley. The Charles Street Works, Hanley, were founded by William Mellor in 1758. He made Egyptian black ware, as did his successors, Toft & Wheeling. The works next passed into the hands of Toft & May, and a little later May alone conducted the business. He was succeeded by William Ridgway, who changed the manufacture to that of white ware for the American market. The venture was unsuccessful, and J. W. Pankhurst & Co. succeeded him, from whom the works passed, some fifteen years ago, to their present proprietors, Messrs. Johnson Brothers. Thanks to their enterprise, they soon took front rank among those manufacturers who catered especially for this market—a position they seem likely to maintain. They undoubtedly exercised a great influence on the character of the domestic earthenware coming to this market, producing shapes and decorations of much greater merit than had hitherto been supplied, and substituting a lighter body, which, however, lacked nothing in durability. M 126.

JONES, GEORGE, & SONS, Stoke-upon-Trent. Established by Mr. George Jones in 1861 at the Old Bridge Works. At first white granite only was made, but, the trade increasing, the present Trent

Works were erected, and here a general line of goods was and is manufactured. Mr. Jones received valuable assistance from his sons, the oldest, Mr. Frank Jones-Benham, being now regarded as perhaps the best potter in Staffordshire. Mr. Horace Jones, an artist of no mean ability, was for some time responsible for much of the designing, while the commercial part has long been in charge of Mr. G. H. Jones, whose geniality has done much to build up an extensive business. Mr. W. Candland has been with the firm, we think, from its inception, and is now a partner in the concern. There has been a laudable effort to produce only the best goods it was possible to make, whether in china, earthenware or majolica; and the same relative care is taken with a sponged bowl as with some of those beautiful creations in which underglaze painting is combined with rich and original glazes. The beautiful "Melrose ware is of this nature. The pieces are finely modeled, graceful in shape, and present some brilliant colorings, the grounds varying from a warm crimson to a brilliant yellow. About all these pieces there is an individuality that never descends to a mannerism which it is not easy to describe. Mr. George Jones, the founder of the business, died December 10, 1893. M 127.

"MELROSE" WARE.

JOUBERT & CANCATE, Limoges, 1793.

JUDEA. The manufacture of pottery in Judea seems to have been confined exclusively to domestic articles, resembling the Egyptian both in form and finish, though in the decoration grapes and foliage were substituted for the lotus, papyrus, etc., of the Egyptians.

JULL. A potter of Wrotham, Kent. The site of his manufactory is known to have belonged to one John Evelyn, cousin to the author of "John Evelyn's Diary." About 1700.

JULLIEN. (See Jacques & Jullien.)

JUNIUS, ISAACK. An artist of Delft. Devoted himself late in life to the decoration of faïence, in which he had apparently no success. A plaque in camaieu blue is signed "Junius, 1657."

K

KADOS. A Greek vessel for drawing liquids. It had two small handles and one larger one.

KAGA. A province of Japan to the northeast of Kioto, cele-

FIG. I.

brated for its wares decorated in rich red and gold. The manufacture was started in the sixteenth century by Tamora Gonzayemon, a Hizen potter, assisted by a painter named Kuzumi Morikage. The characteristic red and gold ware was not made until 1650, when Godo Saijiro established a kiln at Kutani, where the clay is found from which the greater part of Kaga pottery is made. About eighty years ago a kiln was erected at Yamashiro by a potter named Yoshitaya, who rapidly developed the trade, and twenty years later the style of painting originated by Morikage was revived by the artist

Shiozo. There is an absence of work showing the intermediate steps of progress between these periods, and old specimens of Kaga ware are extremely scarce. For earthenware the ware is extremely hard and almost approaches porcelain. The treatment varies from overlapping medallions containing scenes, to dragons, fish and seaweed. The late period is distinguished by the introduction of a warm brown, and the body is now porcelain. A dense earthen-

FIG. 2.

ware with polychrome decorations of considerable artistic feeling is also produced. Fig. 1 shows a piece of the early period. Fig. 2 the earthenware last mentioned.

KAHLER, HERMAN A., Noestved, Denmark. His pottery is unostentatious in form and color and has high artistic merit, combining both style and distinction. He has a characteristic luster glaze of great depth and a red of fine brilliancy.

KALPIS. A Greek water bottle similar to our modern ewer.

KAM, DAVID, son of Pieter Gerritsz. Became in 1701 the proprietor of the manufactory of the Peacock, of which he preserved

the mark. It is believed that it was under his direction that the curious and beautiful pieces of engobe were produced of very remarkable color.

KAM, GERRITSZ PIETER. Master potter established at Delft in 1674 at the sign of the "Three Barrels of Ashes." That he was an artist of talent may be known from several of his important pieces marked with a "G K" in monogram.

KAM, PIETER GERRITSZ. Master potter established at Delft in 1667. His faïence, of a fine paste generally decorated in camaieu blue in Oriental style, is marked "P K."

KAMEJI, MIYATA. A present-day Japanese potter of Kioto. Makes both china and earthenware.

KAMEYA, BUNPEI. A present-day china manufacturer of Kioto.

KAMEYAMA WARE. "This kiln is situated on a hill near Nagasaki. The date of its foundation is not known. It is certain, however, that it was established after the Arita system for the purpose of imitating the Chinese sometsuke by making use of a clay found on the island of Amakusa. Since the period Tempo (1830-43), a material has been imported from China, and is employed mostly in the manufacture of tea services or *sake* vessels. They are gray in color, of a coarse body, painted with dark blue color resembling a kind of porcelain known as Gosu. This ware met with great favor from amateurs until within the last decade. Since then the quality of the ware has declined, and the factory is now closed."—*A. W. Franks, F.R.S.*

KANDLER. (See Dresden.)

KANO, NOANABU. A distinguished Japanese artist who was living in 1670, said to have decorated Soma ware.

KANOUN. A Greek dish for table use.

KANTHAROS. A Greek drinking vessel with two handles rising above the lip. It has usually a stem.

KAOLIN. Decomposed feldspar derived from the decomposition of granite rocks. It consists of silica and of alumina, and, being mixed with petunste, forms the natural or hard porcelain. Kaolin is found in China and Japan, in Cornwall (England), Aue (Saxony), St. Yriex (France), and in Florida (United States).

KARA-MONA. Ware made with Chinese clay in Japan is so called.

KARATSU WARE. The earliest glazed pottery is considered to have been made at Karatsu toward the end of the seventh century. The first production was a kind of faïence, but stoneware was also made. Both are of great rarity. The ware resembles that of Corea,

and the kilns were probably erected by Coreans. The ware is classified according to the period of manufacture: (1) From the foundation of the pottery to the period Kencho (1249-55); (2) to the period Yeiroku (1558-69); (3) to the beginning of the period Keicho (1596). Ware made between the years 1600-54 is known as "Middle Old Karatsu," while the later ware is styled Karatsu yaki. There are at present no good workmen, and the manufacture has almost ceased. (See also Abo.)

KASHAN. (See Persia.)

KASHIU MINPEI. (See Awaji.)

KASHI-KARI. The common name for Persian earthenware.

KATO SHIROZAYEMON. (See Toshiro.)

KATO TAMIKICHI. A potter, brother to Kato Kichizayemon, went to Arita, where he married the daughter of a porcelain manufacturer established there. He remained for four years for the purpose of studying the manufacture of porcelain, and then returned to the Province of Owari, where he succeeded in making, with a clay he had found, porcelain decorated with blue painting under the glaze and known as sometsuke. Since this time the trade has continued to increase.

KATSUZO TSUJI, Arita, Japan. One of the distinguished manufacturers of the present day, especially skilled in piercing porcelain. He receives employment from the Imperial Court.

KAWAMOTO MASUKICHI, Seto, Japan. A present-day manufacturer who is especially skilful in making large tables of sometsuke, some of which are from five to ten feet in diameter. We give this on the authority of A. W. Franks, who states that Kawamoto has the monopoly of this business—a fact hardly to be wondered at.

KEAN, MICHAEL. (See Derby.)

KEEL, ABRAHAM VAN DER. Master potter established at Delft about 1780; he was the last proprietor of the fabrique at the sign of the "Lampette." His name is found on a piece made at this fabrique with the date 1791.

KEELING, ANTHONY. Succeeded Enoch Booth at Tunstall. In 1786 he was making queensware and was succeeded by A. & E. Keeling.

KEELING, EDWARD, Hanley, 1706 to 1802.

KEELING, JAMES. Successor to the above. About 1828 he was making fair printed earthenware with Oriental scenery.

KEELING, TOFT & Co., Hanley, 1806 to 1824.

KEES, SOLOMON G., was a potter at Nuremberg in 1731.

KEFFER, H. A. Secretary of the Potters' Coöperative Works, East Liverpool, Ohio.

KEISER, AELBRECHT CORNELIS VAN. Master potter established at Delft in 1642. "He was the first," says M. Havard, "to imitate the porcelain of Japan, and thus opened to Delft faïence makers new fields, all the more productive because Oriental porcelain was at that time in so great demand. His works, wonderfully remarkable, are of an extreme lightness and astonishing delicacy. The glaze is very white and very pure; the decoration very fine and rich without being too overloaded; the enamel is superbly brilliant. Even with the piece in one's hands one would believe it to be porcelain." He marked in blue "A. K."

KEISER, CORNELIS AELBRECHTS VAN, son of the preceding. Was master potter at Delft in 1668. He was associated with his two brothers-in-law, Jacobus and Adrien Pynacker, and to insure against counterfeit the beautiful pieces of Oriental decoration in polychrome and gold of which his father had discovered the secret, he registered a mark formed of his name and those of his associates—a mark which up to the present has never been repeated on any other faïence. The pieces which he executed when he worked alone, and of which many are decorated on a black or brown ground, are marked with a C. K. in monogram.

KELEBE. A Greek wine cooler.

KELLER, SEBASTIAN. (See Luneville.)

KELLER & GUERIN. (See Luneville.)

KESSEL, AMERENSIE VAN. Faïence maker established at Delft in 1675 at the sign of the "Double Flagon." Her monogram is found occasionally on faïences of polychrome decoration.

KESSEL, JERONIMUS PIETERSZ VAN. Master potter established at Delft in 1656 at the sign of the "Metal Pot," a fabrique established by his father.

KESSEL, LUCAS PIETERSZ VAN, son of the preceding. Faïence maker of Delft in 1675. Several pieces in cashmere polychrome decoration, with flowers and lambrequins of a beautiful execution, bear his initials, L. K.

KEST, DIRCK VAN DER. Master potter established at Delft in 1698 at the sign of "The Boats" (In de Boot). His faïences, decorated with religious subjects, painted in camaieu in dark, almost black, blue, are easily recognized. Some bear the monogram of Vander-Kest, accompanied by the name of his sign.

KEYSTONE POTTERY COMPANY, Trenton, N. J. Manufacturers of sanitary ware.

KERAMOS. The son of Ariadne and Bacchus, and the patron of potters, to whose name we owe the word "keramic" or "ceramic."

KERR, W. H. Partner in the Worcester Porcelain Company from 1850 to 1862. (See Worcester.)

KERR & BINNS. (See Worcester.)

KERR, W. H., & Co. (See Worcester.)

KICHIBEI BANKO. In the period of Sho-o or Manji (1652-60) established a kiln at Koume-mura, near Tokio. The ware somewhat resembled Satsuma, and is now known as Yedo Banko. The manufacture has been discontinued, and the articles going by the name of Banko in foreign markets are made at Kuwano, Yokka-ichi and the neighboring district in the Province of Ise.

KICHIZAYEMON. The present and eleventh generation of manufacturers of Raku ware. (See Ichi-niu.)

KICHIZO, UCHIUMI, Japan. A maker of Kutani pottery of the present day.

KIEL, ALBURTUS. Master potter at Delft, established in 1764 at the sign of the "Star." Save for a few rare exceptions, his faïences are quite common ware, marked with his monogram, sometimes accompanied by a star.

KIEL, Denmark. A manufactory of faïences was founded in this city by John Buchwald about 1760. Under his direction, with the aid of Abraham Leihamer, an artist of merit, faïence of superior quality was produced that was decorated on the glaze. The fine shapes and admirably executed decorations rank them among the most beautiful products of the end of the last century. M 128. A very beautiful plaque of the Gasnault collection at the Museum of Limoges, with a frame in relief, representing a marine, signed "A. Leihamer, f.," bears on the reverse

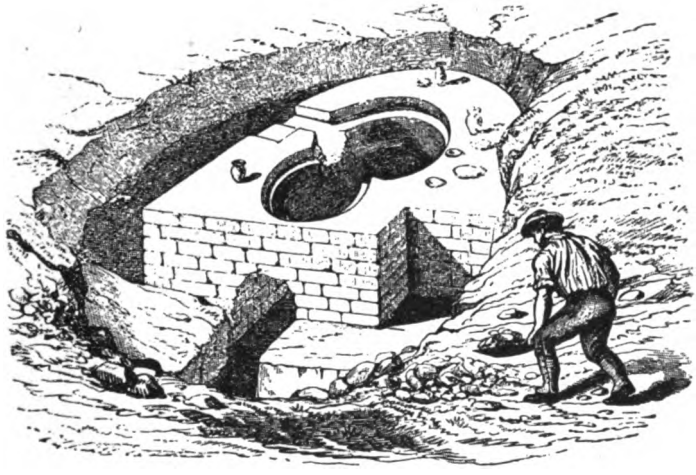
K.
B. Directeur.
A. Leihamer, fecit. 1760.

KIHEIJI. A celebrated Japanese potter, who, it is said, accidentally discovered the use of the sagger on opening the kiln after the firing was finished. He found that one pot had fallen inside of a larger set on a lower stand. On breaking away the outer piece he found, to his astonishment, a finished production. This suggested to him the use of an outer box, or sagger, about 1665.

KILLINGHUSEN, Sledswig. This fabrique does not appear to

have been very important, and its history is unknown. The Sèvres Museum possesses a pretty basin, deep and of oval form, with a border bearing in relief flowers and shells, and decorated with bunches of flowers and buds painted under the glaze and quite freely executed.

KILNS. When it was discovered in prehistoric ages that fire was necessary to give durability to pottery, it was the first step in the evolution of the kiln. When and where or by whom the first kiln was constructed is unknown, but we do know that it was at a very remote period. The ancient Egyptians used them fifteen centuries before our era commenced. Homer has immortalized their use by the Greeks; remains of those used by the Anglo-Romans have been found in good preservation, nor is there wanting evidence that



POTTER'S KILN, NORMANGATE FIELD, CASTOR.

it was the funeral pyre that may have suggested their use to them. We give an illustration of one of these Anglo-Roman kilns. The Italians used three kinds of kilns, one of which was used for oxidizing the lead and tin. The Japanese kilns are built in terraced rows of from four to twenty, and rise about three feet above each other, gradually growing in size as they extend up the hill. These are connected with air-holes, the heat rushing through the entire row, where it is carried off in chimneys behind the uppermost kiln. Where there is a colony of potters these kilns belong to the community and are rented to the potters. In France the green ware has a much ligher fire than the glaze, and by dividing the kiln into two

compartments and placing the glazed ware in the bottom, and consequently the hottest part, the superfluous heat passing to the upper chamber, is all that is required to fire the green or clay ware. In England and America the clay ware requires the hardest fire. The kilns—or ovens, as they are called in England—are tall circular towers ranging in height to forty and fifty feet, with a diameter of fourteen to sixteen feet inside. They are built perpendicular about twenty feet and then taper to the center for a similar height, to an opening four or five feet at the top. Around the base of the kiln are ten or twelve furnace openings, connecting with flues built under the floor and against the inside walls of the structure. On the inside of the kiln at a height of fifteen feet is a dome or crown to retain the heat, with a suitable number of openings to allow smoke, gases and dust to escape. At one side of the kiln is an oval-shaped opening, the door of the kiln, which is bricked up when the firing commences. The ware is placed in saggers, which are piled one on top of the other until the kiln is filled. The fires are then lighted and the kiln is fired for about forty-eight hours. The glost or glazed ware kiln is similar to above, but firing only occupies about half the time. In the mouffle or enamel kiln saggers are not used. The furnace openings are at the side of the kiln and are connected with flues built between the double walls of the structure, so that the fire and smoke will not come in contact with the ware. The firing occupies about seven or eight hours. It is understood this enamel kiln is used only for ware with the decorations applied on the glaze.

KIKKO. A Japanese potter of to-day who makes the Osaka Raku ware. His work is finer and more delicate than other Raku, but is not so tasteful, and, consequently, not favored by the tea-drinkers. His common ware is very good.

KIKU-MON. The chrysanthemum, the badge of the Empire of Japan. (See Heraldry.)

KING-TEH-CHIN, or KING-TE-TCHIN, is situated in the Province of Kian-si, and is the great pottery center of China. It was celebrated as early as the Tch'in dynasty (577-588) for its china manufactory. About 1004 to 1007 a manufactory was established here for the Emperor Tchin-tsong, and the name of the town changed from Nan-tchang-tchin to its present appellation. The streets are laid out with great regularity, but are too narrow and the houses too crowded. There were about three thousand kilns in operation in 1717. The precautions against fire are excellent, there being a policeman to every ten houses. Every street is barricaded at night. The town is situated upon two rivers, one of which is

very broad and forms a fine port or basin which is filled with boats bringing materials or carrying away the finished product. There is neither wood nor clay in the neighborhood, and both have to be brought long distances. Strangers are not allowed to sleep in the town, but must lodge on board their vessels or with people of their acquaintance, who are answerable for them to the authorities. During the Taeping Rebellion the town was sacked, the Imperial works were pillaged, and all the kilns and workshops were destroyed. The town has since been rebuilt and the industry resumed, but probably not on so large a scale.

KIOTO, formerly called Miaco, was in 1690 the residence of the

KIOTO VASES.

Emperor. It is probably one of the oldest seats of the potter's art in Japan. A Corean named Ameya settled there in 1550, and originated the manufacture of Raku ware. Soon afterward he changed his name to Sasaki Sōkei and produced tea bowls, etc., for the Tea Ceremonies, which were so highly esteemed by the hero Taiko Sama that he gave to the son of Sasaki a gold seal upon which was engraved the character Raku, signifying enjoyment, and directed him to impress it upon each piece of ware he made. It was from this circumstance the ware takes its name. The manufacture of this

ware has been continued by eleven generations. The second Chojiro lost this seal; so each maker has used a stamp of his own. Tanniu, the tenth in descent, received a new seal from the Prince of Ku. It is rudely potted by hand and is made of coarse earthenware, but the glaze is very soft and velvety. Artistic pottery was made in Kioto by Nonomura Ninsei about 1650, and he also originated the manufacture of faïence in Awata. Ninsei ware is much esteemed. It was cleverly imitated during the first half of the eighteenth century by Shisui Kenzan, and these pieces are also much prized by the Japanese. Modern imitations abound. They are made of a reddish-brown pottery decorated with figures. Prior to the beginning of this century the porcelain of Kioto was inferior to that of Hozen and Owari, but considerable progress has since been made. Up to recent times the makers, with one or two exceptions, have decorated only in blue, relying on the freedom and grace of their drawing and the beauty and purity of the color employed. Of late years colored enamel has been introduced in the decoration. Many curious examples of the potter's art distorted into the most fanciful shapes and enameled in the most eccentric fashion are made in the neighborhood. Awata ware has already been mentioned. (See also Harima, and Nin-sei.)

KIRO-MON. (See Guik-mon, and Heraldry.)

KI-SETO WARE. Made in the Province of Owari. The factory was founded in the period Onin, or Bunmei (1467-86), by a man of the name of Haku-au (*q. v.*). The name of the ware, meaning "Yellow Seto," is derived from the color of the glaze. The earliest works are covered with a very fusible transparent glaze, through which the body can be seen. Afterward a thin, but opaque, glaze was used, relieved by small, transparent spots of verdigris color. Representations of the plum flower, chrysanthemum and creeping grass were also used in decorating it. The deep yellow specimens are considered the best.

KISHERE, JOSEPH, Mortlake, Surrey. Drab stoneware, ornamented with hunting and other scenes in low relief, was made here. The pottery was in existence as late as 1811.

KLEYNOVEN, G. A potter of Delft, 1680.

KLIFTIJUS, HALLEM. Master potter established at Delft in 1663; was born at Cologne and lived at Amsterdam until he removed to Delft. He produced principally polychrome faïences with decoration imitated from Oriental porcelain. He marked with his monogram, often accompanied by figures.

KLITIAS. A Greek painter. His name has been handed down

to posterity as the painter of one of the most renowned ceramic specimens in the world—the Francis vase. It has figures in black representing a considerable portion of the history of Hercules.

KLOOT, CORNELIS VAN DER. Potter at Delft in 1695; worked in several fabriques and finally established himself on his own account. Quite a number of faïences of his are known and are of careful execution, and are marked with his monogram, sometimes accompanied with a date or figures.

KLOOT, JOHANNES VAN DER. Master potter established at Delft in 1764 at the sign of the "Roman."

KNAPPER & BLACKHURST, Dalehall, Staffordshire. This factory was founded by John and James Rogers. The latter died in 1815, and Spencer Rogers joined his father, and the business continued as John Rogers & Son. In 1842 the works were purchased by James Edwards, after his death were continued by his sons, and eventually passed into the hands of Knapper & Blackhurst, the present owners. Earthenware of ordinary quality is produced.

KNOWLES, TAYLOR & KNOWLES COMPANY, East Liverpool, Ohio. This pottery, the largest in America, had its beginning in 1853, when ground was broken by Isaac W. Knowles, the founder of the business, who commenced active operations the year following. Then the only kiln was used alternately for biscuit and glost ware. The power was furnished by a horse. The ware made was yellow ware, known for many years as Liverpool ware. In 1870 John N. Taylor and Homer S. Knowles, the latter a son of Isaac W. Knowles, associated themselves with him, the total kiln capacity of the works being then two—one for biscuit and one for glost ware. This capacity was then increased to five kilns—quite an extensive plant for an American pottery in those days. The firm, which was then called Knowles, Taylor & Knowles, commenced the manufacture of white granite, drawing their first kiln of this order of goods September 5, 1872. This was the first white granite made in East Liverpool. The business grew, and the firm put their earnings in the business, enlarged the plant, extended their manufacture, until to-day they stand one of the best equipped potteries in the world, the works covering six or seven acres of ground, and giving employment to about seven hundred workpeople. In addition to white granite, semi-porcelain and hotel ware, the firm a few years ago produced a number of ornamental pieces which they called Lotus ware; but the manufacture has never assumed large proportions. In 1891 a corporation was formed with a paid-in capital of $1,000,000. The officers are as follows: Colonel John N. Taylor, president; Isaac W. Knowles (the founder, now in

his seventy-ninth year), vice-president; Joseph G. Lee, secretary and treasurer. These, with Edwin M. Knowles, constitute the board of directors. M 130.

KNOETTER, JOHANNES. Master potter established at Delft in 1698. He was one of the successors of Jacobus Pynacker in the fabrique with the sign of the "Porcelain Bottle."

KO-IDSU HONNAMI, a sword connoisseur who died in 1637, erected a kiln and made Raku ware, which, while harder than the original, was much admired by the tea-drinkers.

KÖNIGLICH BAYERISCHE PORZ. MANUF. (See Nymphenburg.)

KONING, HENDRICK and GILLIS DE. Makers of faïence at Delft in 1721. Their monograms, often found united, lead one to suppose that they were associated; but that of Hendrick is found alone on faïences decorated in blue, red and gold, of perfect execution and rich decoration:

G d K	H d K
H d K	———
1721	2

KOOGE, ABRAHAM. Master potter established at Delft from 1632 to 1679, and associated in 1648 with Pieter Joppe Oosterlaan. M. Havard says: "Abraham de Kooge may be considered as one of the greatest of the artists who have made famous the faïence of Delft. He was one of the renovators of Holland ceramic art, and the most beautiful plaques that are attributed to him may be classed among the masterpieces of style. These marvelous plaques, of which the greater part represent landscapes, and a few portraits, are painted in camaieu blue, with a breadth, a solidity and fulness that have not since been equaled. These splendid works are never signed, but nearly all are dated at the back, and sometimes the date is enveloped with ornaments that betray the artist of high rank."

KOOL, or Cool, JACOBUS. Master potter established at Delft in 1676, who in 1714 became proprietor of the fabrique at the sign of the "Moor's Head." He did not use the mark of the manufactory, but signed his faïences simply with the two first letters of his name, "JK."

KOOL, or Cool, WILLIAM. Master potter established at Delft in 1697 at the sign of the "Three Bottles." His faïences are marked with a monogram which it is easy to confound with that of William Kleftijus; but those that are decorated in blue, red or gold should be attributed to Kool.

KOOM, Persia. Underglaze water-cooling bottles are largely made here.

KOOS, MAX, Miskolez. Manufacturer of majolica. M 131.

KORAI, SAIYEMON. (See Hagi.)

KORDENBUSCH, ANDREAS. A painter of Nuremberg.

KORDENBUSCH, GEORGE FREDERIC. A potter of Nuremberg. Born 1731, died 1802.

KORNELOFF BROTHERS, THE. Established a china manufactory in St. Petersburg in 1827.

KORZAC, Poland. Hard porcelain has been made here since 1723.

KO-SETO. (See Toshiro.)

KOTHON. A Greek drinking-cup; also called "skyphos."

KOTYLUS. A Greek vessel used for serving from the wine-cooler.

KOUAN-YAO. One of the Chinese dynastic colors on porcelain, for the especial use of magistrates. It is of two shades of blue.

KOUEN-ON. Said to be the discoverer of the potter's art in China, 2700 B. C.

KOYO, a Corean of the family of Boku. Found clay in the Province of Satsuma, and was the first to make the ware decorated in gold outline, A. D. 1630.

KOZAN MAKUDZU, Tokio. His specialty is fine blue and white porcelain, but his productions are quite varied, including large and artistically decorated jars. His exhibit at the Paris Exposition attracted much deserved attention.

KRATER. A Greek wine-cooler.

KRAUSE, R. M. A manufacturer of fine majolica wares at Schweidnitz. Established 1882. M 132.

KRAUT, HANS. Faiences decorated with reliefs and covered with enamels were made at Villengen in the Black Forest. He was a talented disciple of the school of Nuremberg, and died in 1590.

KRONENBURG. (See Ludwigsburg.)

KROSSOS. A Greek vase, a modification of the hydria.

KRUISWEG, ANTHONI. Master potter established at Delft in 1759. He succeeded Jacobus Kool as proprietor of the fabrique of the sign of the "Moor's Head," for which he preserved its former reputation. He marked with his monogram.

KRUYCK, JOHANNES. Maker of faïence established at Delft in 1662, whence he went to Rotterdam, where he is again found in 1705. There are generally attributed to him faïences decorated in camaieu of a beautiful blue, and of plates with armorial bearings, with borders of flowers and lambrequins of very beautiful execution, marked "K."

KUIK, MICHAEL VAN. Potter at Delft. The collection of P. Gasnault at the Limoges Museum possesses a plaque decorated in

camaieu blue representing "The Return of the Prodigal," and signed "M. V. Kuik, 1765."

KULICK, or Culich, JAN JANSZ. Potter at Delft, where in 1662 to 1680 he directed as foreman several establishments. He was a ceramist of very great ability, and possessed a certain renown. According to M. Havard, he adopted a mark which he had registered in 1680, but up to the present time this mark has never been encountered.

KUNTZ, CHRISTIAN GOTTLIEB. A painter at Hochst, 1794.

KUNERSBERG, Bavaria. This manufactory is but little known, and its rather rare products are of beautiful make and decorated with bouquets of decorative style, well painted. The mark was the name "Kunersberg." A charming pitcher in the Sèvres Museum, with bouquets delicately drawn in manganese and washed in with rose, violet and blue, which last makes a light halo on the enamel, is marked "KBS."

KURO, HIRASAWA. Seto-Kura ware was made by Hirasawa Kuro, a native of Seto, Japan, in the Province of Owari. He lived about 1781. He was very skilful in imitating different kinds of ancient pottery from every factory of Owari, and his work is so good that it is almost impossible to distinguish it from the original.

KUSNETKOW. This earthenware factory, situated in Russia, is said to be the largest in the world.

KUTANI WARE. Derives its name from Kutani-mura, in the Province of Kafa, where the clay from which it is made is found. An incorrect supposition is that it received the nam "Kutani," meaning "nine valleys," from the fact that there are nine valleys in the vicinity of the factory. The pottery industry was founded in the seventeenth century, and was improved by Goto Saijiro, who introduced a ware with red ground and gold outline. Kuzumi Morikage, a painter, also assisted much in the promotion of the art. About 1781 to 1800 the industry declined. Ten years later Yoshidaya erected a kiln at Yamashiro-mura, and made great efforts to restore the ancient manufacture, while fifty years ago a porcelain painter named Shozo resumed the art of painting practised by Morikage. The village of Kutani is situated in a mountainous region where the snow lasts until June or July, and is therefore unsuitable for a pottery, and is also some distance from where the clay is found. The ware is of a dark red or gravish white color. The present manufacturers are Yuzan, Shoro, Shigeharu, Kichizo and Hekizando.

KYATHOS. A Greek cup or ladle.

KYLIN. A Chinese monster. An animal of good omen. Its

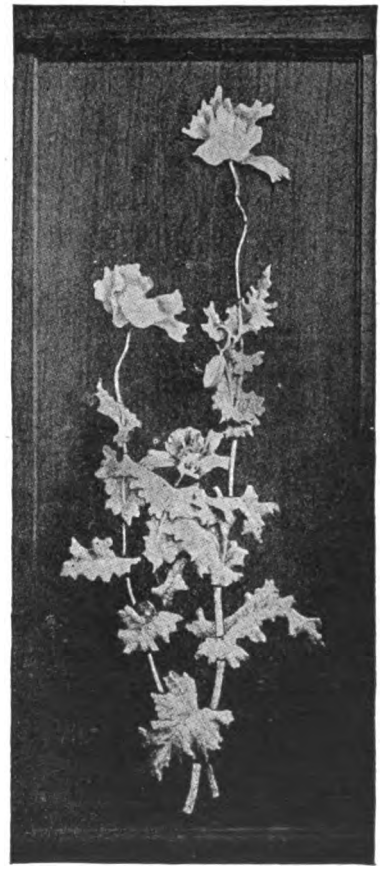
body is covered with scales, and its head resembles that of a dragon.

KYLIX. A Greek cup of various shapes. It has a long stem and two handles and is wide and shallow.

L

LA CHARITÉ. A secondary manufacture of faïence in the style of Nevers, and contemporary therewith.

LA CHINA. Another name for the royal manufactory of Buen Retiro (*q. v.*).



LACHENAL, EDMOND, Paris. After working for some time in *grès flammés*, in which he obtained the most brilliant coloring, M. Lachenal in 1900 turned his attention to a lower scale of color, and he has produced some most exquisite specimens of pottery with dull glazes, the colors, though pure and not without tone, being barely indicated. He is at his best when he goes to flowers for his inspiration, for he uses them with artistic truthfulness and with great simplicity adapts them to his purpose. A vase formed of a cluster of narcissi is a good example, the flowers forming the opening and the bulbs the feet. The tinting is extremely light, the pale greens and yellows being suggested rather than realized. In addition to these vases and figures in *grès*, M. Lachenal has successfully applied faïence to the decoration of furniture, the pieces being incrusted with flowers delicately modeled, the color notes being beautifully blended.

LAEN, JAN VAN DER. Potter of Delft, 1675. He directed the manufactory of the "Three Bells," in which he passed nearly all his life. During his management he was authorized to mark with his monogram the most of the pieces that came from this manufactory.

LAFERTE. (See Isle St. Denis.)

LAFOND. An artist engaged by Haviland & Co. when producing faïence. He was one of the three originators of the particular style at Bourg-la-Reine.

LA FORÊT, Savoy. A faïence works was inaugurated here in 1730 by Noel Bouchard, an iron merchant of Chambery, who brought from Nevers two potters, Antoine Mogery and Pierre Mietaz, to whom he added later other workmen from Nevers. Bouchard died in 1756, and he was succeeded by his two sons, James and Joseph, who attempted, without success, to add to the manufacture of faïence that of porcelain and English earthenware. Later, his grandson, Pierre Bouchard, succeeded to the management. In 1797 he entered into partnership with Joseph Dimier, his brother-in-law, but it had only an ephemeral existence, and its rupture led to the complete decadence of the manufactory, which ceased to exist in 1810. The productions generally resembled those of Nevers, though the decorations are richer. The mark was "La Forêt en Savoy."

LAGYNOS, a Greek vessel with a very narrow neck, and of considerable size.

LA HUBAUDIERE & Co. (See Quimper, and Fougeray.)

LAKE-DWELLERS. Before the founding of the Roman Empire there existed a people who built their huts on piles in the lakes of Switzerland, and commemorated themselves by hand-wrought pottery, varying from a friable clay to hard stoneware, ornamented with painted and incised lines and moldings. Some, of a sepulchral character, are thought to resemble their dwellings; others appear to have been intended as toys.

LAKIN & POOLE. Were potters in the Staffordshire potteries towards the end of the last century.

LA MANCHA. Ferdinand II., after the destruction of the Buen Retiro works, opened a works here, but the glory of Buen Retiro had departed.

LAMBETH. Much obscurity hangs over the early potteries of Lambeth. We know that Edward Warner sold potter's clay there to London potters as early as 1668. As we have seen, John Ariens van Hamme (*q. v.*) took out a patent in 1676 for making tiles and porcelain "after the way practised in Holland," and had settled in Lambeth. While we have no direct knowledge that salt-glazed stoneware was made at Lambeth in the seventeenth century, we know there was at least one pottery there in 1699, as Savory tried his new steam-engine at a pottery in Lambeth. Several pieces, among them a mug dated 1650, a candlestick with the Fishmongers' Arms and

the date 1648, wine pots dated 1662, point to an earlier date than Van Hamme's patent. The body of these wine jugs is a pale buff clay, harder than the Dutch ware, covered with a tin enamel, lettered in blue, and then covered with a lead glaze. Painted dishes, with scriptural and other subjects, more in the Italian than the Dutch style, bear dates from 1653 upwards. Griffiths had a "Delft" pottery in High Street about the middle of the eighteenth century. The Misses Coade (*q. v.*) had works there in 1760, which were in existence up to 1840, while Griffiths & Morgan were in business in 1776. "The London Pottery" of Messrs. Stiff & Sons was established as early as 1751; the Lambeth Pottery of the Doultons in 1818. (See Doulton.) The rapid growth of the "Staffordshire Potteries" brought the Lambeth industry to an end, with the exception of the two last-named houses.

LAMBREQUIN. A decoration peculiar to Rouen, France. It was generally traced in blue, and consisted of two alternate corresponding designs, so repeated as to form a more or less rich border. The lambrequins were composed of scalloped leaves, palms and scrolls, often connected with wreaths delicately uprising against the whiteness of the enamel. The Chinese made similar patterns in the fourteenth century.

LAMONINARY. (See Valenciennes.)

LAMPRECHT. An animal painter at Vienna, who afterward worked at Sevres.

LANDAIS. A nephew of C. Avisseau, of Tours, who continues the excellent work of reproductions of Palissy ware, initiated by his uncle. (See Avisseau.)

LANE END AND LANE DELFT. (See Longton.)

LANFRANCO GIROLAMA and his son Giacomo had a fabrique at Pesaro. In 1569 Duke Guidobaldo II. granted to Giacomo a patent for fifteen years for his method of applying gold upon majolica and also for making vases of an ancient form and enormous size wrought in relievo. The art was not a revival of the old metallic luster, but the real application of gold as now practised. This patent also exempted himself and father from taxation.

LANFREY, FRANÇOIS. (See Niederwiller.)

LANGER, HERR, Karlsruhe. Vases in faïence of quaint and original design, finely conceived and potted, and tiles for fireplaces, &c., are his principal productions.

LANTERNIER, A., Limoges. Established as a manufacturer of china in 1885, succeeding his father, who had carried on there a dec-

orating business. His ware is of very good quality and the decorations pleasing. M 133.

LAO-TSEU, or Cheou-las, the Chinese god of longevity. Many images of him are made in porcelain. The Chinese legend states that after a pregnancy of eighty-one years his mother brought him into the world, and when born his hair was as white as that of an old man, and hence his name, Lao-tseu, "the old man child." Being deified by his followers, in course of time he was regarded as identical with Chang-ti, and in this form the potters represent him as the god of longevity. In his hand is the fruit of the fantao, a fabulous tree said to blossom but once in three thousand years, to bear fruit one thousand years afterwards.

LA ROCHELLE, CHARENTE-INFÉRIEURE. A manufactory probably existed here early in the seventeenth century, though nothing very precise on this subject is known. In 1721 a potter named Catarnet started a manufactory, but probably owing to lack of funds it had but a brief existence, as in the following year we find him addressing the General Hospital asking them to establish on their grounds and at their expense a manufactory with himself as director, receiving by way of compensation one-quarter of the profits. Arrangements had hardly been effected when Catarnet died, naming as his successor François Mourelou, of Lyons. His abilities did not prove adequate to the position and he was obliged to leave the works about 1725. He was succeeded by Duboc, who was equally unsuccessful, and the works were finally abandoned in 1728. Other potteries were later founded here, and finally in 1743 that of Bornier, followed by Briquebille, to which is attributed the mark "I. B. 3." Later that of the Place Habert, for which all material came from Marans, and which under the direction of several potters more or less skilful existed until 1789. The productions of La Rochelle show the diverse influence of directors who came from all parts—the blue decoration imitated from Nevers, the style of Rouen, and later the polychrome decoration where blue dominates, and finally imitations of Moustiers and Strasburg, are all represented. To these may be added a more original and distinctive decoration of which the principal subject is generally a peacock, accompanied by a basket or a shrub with branches of leaves and bluets, and insects and butterflies on the rim. Other exceptional pieces were fountains and large jardinières in white enamel with colored relief decorations very similar to those of Marieburg.

LA SEINIE, Hte. Vienne, France. This manufactory was established near Saint-Yriex, about 1774, by the Marquis de St. Aulaire

and the Compte de la Seinie. It principally produced white china, which was sent to the Parisian chambrelans to be decorated. It, however, produced boldly painted porcelain marked with an "L" and "S" in script, sometimes interlaced, sometimes separately painted.

LASSI, JOSEPH. Manufactured hard porcelain in the Faubourg St. Antoine, Paris. Founded in 1774. The mark is a script "L" and a dot or a plain Roman "L."

LASSUOLO, near Medina, Italy. Work was executed here from 1741 by Pietro Lei de Modena and Ignacio Cavazzuti.

LATHROP, CHARLES. Manufactured earthen and stoneware at Norwich, Conn., previous to 1796.

LAUN, VAN. (See Amsterdam.)

LAÜGER, Professor MAX, Carlsruhe, Baden. Having learned the art of pottery among the sturdy artisans of Kandern (who make cooking utensils of quaint shapes, using only six colors in their decoration), inaugurated a society formed of artists from beyond the Rhine. He formed an intimacy with a celebrated chemist of Munich, Max von Heider, but later banished him absolutely from his workshop. Von Heider then associated himself with his three sons, Hans, Fritz and Rudolf, who were well known painters and sculptors. They quickly produced some remarkable pottery and this entirely unassisted by workmen, every detail of the manufacture being done by one of the four. Such an aggregation of talent could hardly fail to create original pieces of a high degree of excellence. Professor Laüger's work retains the freshness and simplicity, and he paints the wild flowers with the touch of a lover of nature. His pieces are especially suitable for simple interiors, while those of the Von Heider family seem to call for luxury and elegance in their surroundings, showing consummate skill and finish in their workmanship. The Von Heider family moved from Munich to Schöngau in Upper Bavaria, whence they have issued their successful pieces.

LAUGHLIN CHINA CO., East Liverpool, O. Established in 1874 by Homer and Shakespeare Laughlin, under the title of Laughlin Bros., for the manufacture of white granite. Shakespeare Laughlin withdrew from the firm in 1879, and from that year until Jan. 1, 1897, when the business was incorporated under the above title, the firm name was Homer Laughlin. For several years a thin translucent china was produced, but was discontinued in 1889, and the product has since been confined to a high grade semi-vitreous earthenware. Mr. Homer Laughlin, realizing the possibilities of his art, never ceased to study and experiment for better results, and to this indefatigable striving after perfection is in a large measure due the

success that has crowned his efforts. Mr. Laughlin is not now an active member of the firm.

LAURAGUIAS BRANCAS, Count DE. (See Brancas.)

LAURIN, BOURG-LA-REINE. Faience with painted flower and figure subjects on the unbaked clay, somewhat similar to that of the Havilands, is produced here.

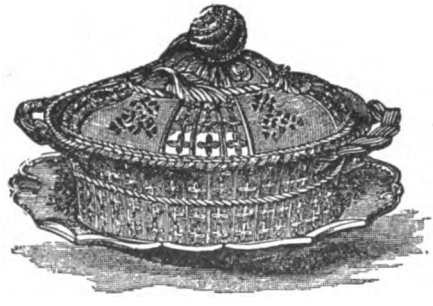
LAUTH, M. A chemist and ex-member of the Paris Municipal Council, succeeded Robert as director at Sèvres.

LEAD GLAZE. A certain amount of lead has been found in the blue colored glazes of Babylon. It was for many ages in Europe used on all kinds of pottery, and through the Western and Northern countries lead in combination with glass seems to have been the earliest and until the fifteenth century the only means known of glazing soft pottery. It is probable that the knowledge of lead glaze was imported by the Greeks from Babylon and by them carried into Southern Italy. Lead poisoning is one of the worst foes of the working potter, and the aspiring chemist who will invent a substitute will take a higher rank in the heart of the working potter than Samuel Plimsoll did in that of the sailor.

LE BŒUF, MILLIET & Co. (See Creil.)

LEE, JOSEPH G. Secretary and treasurer of the Knowles, Taylor & Knowles Co., East Liverpool, O.

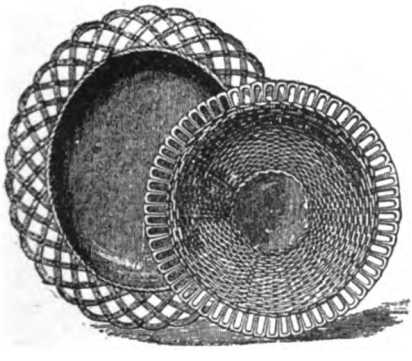
LEEDS. This was evidently a pottery-producing district as early as the thirteenth century, the village of Potters Newton being mentioned in deeds of that date, the name evidently having been given from a colony of potters having at an early date settled there. Tobacco pipes were made there in the seventeenth century. Of the establishment of the Leeds factories nothing definite is known. The first proprietors of whom we have any knowledge were two brothers named Green in 1760, and it is believed their first productions were in black ware, in which they afterwards excelled. It then passed into the hands of Humble, Green & Co., about 1775. In 1783 the firm was Hartley, Greens & Co., who made colored earthenware, both printed and enameled, and the well-known basket and perforated ware. Many additions and changes in the firm took place, which led to disputes, and though a business



of about $150,000 per year was being done, the affair was thrown into chancery. In 1825 a settlement was effected and the business passed by purchase into the hands of Mr. Samuel Wainright. At his death in 1832 the trustees carried on the business as the "Leeds Pottery Company," until 1840, when it was transferred to Stephen Chappell, who was joined by his brother James and they traded as "Stephen and James Chappell." They became bankrupt in 1847. In 1850 the business was purchased by Warburton & Britton. From 1863 Britton was sole proprietor, and in 1872 he admitted his two sons as partners and the business was conducted under the style of Richard Britton & Sons.

The great Leeds specialty which has acquired the name of "Leeds ware" is a rich cream-colored earthenware, a little deeper in tone than the Wedgwood queensware. The glaze originally contained arsenic, but its use was so deleterious to the workmen that it was abandoned. The pierced pieces were very elaborate in design and beautifully potted, and were of course pierced by hand. The two pieces illustrated will give a good idea of their merits.

Transfer printing was introduced at Leeds about 1780, and both gold and silver lusters were made. Black ware was introduced about 1800, and whilst possessing a little bluer cast than Wedgwood's, was of a compact and firm body, and much of it was equal to the Etruria product. It is doubtful whether any salt-glazed ware was ever made at Leeds, though the patterns of some of the salt-glazed Staffordshire pieces are identical with some of those shown in Leeds pattern books. In the Schrieber collection there is a fine bust entitled "Air," on a pedestal in white earthenware. The marks are LEEDS POTTERY * LEEDS * POTTERY, the same in the form of a cross with the



asterisk in the centre, the name HARTLEY, GREENS & CO., LEEDS * POTTERY, and the same in two curved or horseshoe lines.

LEASON, GEORGE, the son of George Leason, who for many years was the potter at the Minton factory. Having learned the trade in all its branches, and acquired a thorough mastery of its working—from handling cups to mixing bodies—he was made manager and afterwards the potter of these extensive works. When the firm became incorporated he was awarded some shares. He has been mayor of Stoke upon several occasions, filling that office to the satisfaction of the inhabitants and the Council, being elected and re-elected three years in succession. He is now with Mehlem, of Bonn.

LEEK. Marryatt has this extraordinary paragraph: "Among the more modern manufacturers must be mentioned a fabric marked 'Mason's Ironstone China,' *made near Leek* in Staffordshire, which, however, is not an ironstone, but fine porcelain. At least, such are the specimens in the collection of the author, consisting of a pair of ewers, finely modeled, rich in gilding and painting, and most creditable to this manufacture, which from the *expensive nature* of its ware *failed of success.*" Mason's ironstone china was made at Fenton. There are no potteries in this moorland town.

LEFRANÇOIS. (See Bellevue.)

LEFEBRE. A painter at Conrade's, Nevers, France. (See Nevers.)

LEFEBURE AND GAVRON. (See Belgium.)

LEGRAIN, a painter employed by Deck, of Paris.

LEGROS D'AINSY, one of the first to employ lithographic stones for decorating earthenware and porcelain.

LEIHAMER, ABRAHAM, an artist at the Kiel works about 1760.

LEITHNER, a potter chemist of Vienna who prepared many of the brilliant colors used there.

LEKYTHOS, a Greek oil jar. Generally about twelve inches high, of elongated shape, a cup-like orifice, and one handle.

LEKKERKERK, Holland. In a wineshop there, is one of the most celebrated works of Delft—the portrait of a famous giant of the eighteenth century, eight feet high.

LELONG, NICHOLAS, had a faïence manufactory at Nancy, established in 1774. The celebrated sculptor, Clodion (*q. v.*), worked there.

LEMIRE. (See Sauvage.)

LENZ, J. F. (See Schaaf, C.)

LEPASTE, a low Greek vessel.

LEPERRE-DUROT, director of the Lille factory, who was the first to employ coal in France for firing china. (See Lille.)

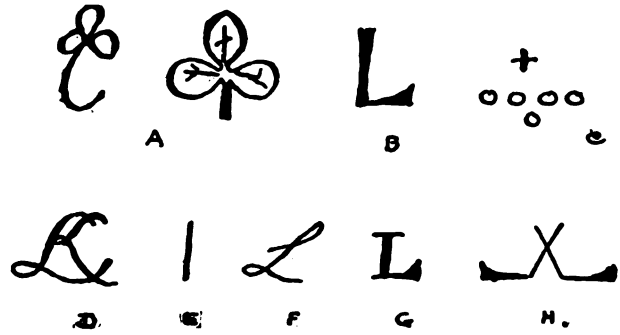
LESSORE, ÉMILE. This talented artist was born in 1805. He was intended for the law, but gave this up for an art life, and entered the studio of Ingres. His first picture was exhibited in the Paris Salon of 1831—a rare distinction for so young a man. He continued to exhibit oil and water colors, which were eagerly bought at high prices. In 1851 he was induced to enter the Royal works of Sèvres, where he attempted to introduce a more artistic feeling. A pair of large vases, decorated by him, exhibited in 1853, were purchased by the Emperor of Russia for 1,000 guineas—about $5,145. The originality of his work caused so much dissension and jealousy among the Sèvres artists that in 1858 he went to England and entered the service of Messrs. Minton, but soon removed to the historic works at Etruria. Here he found congenial surroundings and added his quota to the reputation of the Messrs. Wedgwood. The London exhibition of 1862, Paris, 1867, and Vienna, 1873, all awarded him personal medals. The English climate, however, did not suit him, and he returned to France, establishing himself near Fontainebleau, where he still continued his connection with Messrs. Wedgwood. He died in 1876. We may fairly consider Lessore as having accomplished quite a revolution in the decoration of pottery. His coloring was subdued and delicate, and a master hand is apparent in every touch.

LEVAVASSEUR, JACQUES NICOLAS. Established in 1743 at Rouen, Rue Tous-vents, No. 1. It is to him we owe the four magnificent busts of the seasons, with pedestals, bought for 68,800 francs by the Louvre at the Hamilton sale in 1882. He died June 15, 1755, aged forty years. His widow continued the manufactory, and it finally passed into the hands of her son, Marie Philemon Levavasseur, who introduced or practised the mouffle fire at Rouen, which marked the end of the industry there. He died January 26, 1793, at the age of forty-four.

LILLE. The first manufactory was founded in this city in 1696 by Jacques Féburier, or Febvrier, a modeler from Tournay, and Jean Bossu, a faïence painter. Féburier died in 1729, and his widow, in connection with her son-in-law, François Boussemaert, continued the business, attaining such a measure of success that Boussemaert, in his application to the King for the right to use the title of "Royal Manufactory," did not hesitate to affirm that it was the most important pottery in the kingdom. Boussemaert died in 1778, and was succeeded by Petit. A second factory was established in 1711 by Barthelemy Darez and Pierre Pelissier, which was later directed by the sons of the former—Claude and François-Louis. Two other manufactories were later established—one in 1740 by a Hollander

named Wamps, to whom succeeded Jacques Masquelier; the other, in 1758, by a Strasburger named Hereng, to whom we owe the fine fireplaces, landscapes and figures in camaieu blue in the Musée de Cluny. In 1773 Wm. Clark was authorized "to create a fabric of a kind of faïence which is only made in England"—evidently pipe-clay—but it appears the enterprise was unsuccessful, for two years later we find the same individual soliciting letters patent to establish himself at Montereau. The style of Rouen was closely, almost servilely, copied at Lille at first, but gradually a more original style was adopted. M 134.

LIMBACH, Saxe Meningen. This factory, in the Thuringian forests, was started about 1770, under the direction of Gotthelf Greiner. The Duke Anthony Ulrich promised that the government would supply the wood for firing. Greiner was so successful, his orders being so numerous, that, unable to extend the works at Limbach, he purchased the works at Grosbreitenbach, and also that of Kloster Veils-



dorf, an ancient convent. The mark of his three manufactories is a trefoil (A). Greiner died in 1797 and was succeeded by his three sons. The works at Limbach still exist. The marks B to H are ascribed to Greiner's factories.

LIMOGES. Mr. Marryatt gives the following history of the early days of Limoges: "Soon after the discovery of kaolin at St. Yrieix, Gabriel Grellet, supported by the Minister Turgot, established a porcelain manufactory at Limoges by an *arrct* dated 1773, which granted him permission to export his porcelain without duties, the mark to be "C. D." In 1784 his fabrique was purchased by the King as a branch manufacture of Sèvres. Grellet was director, and Massier comptroller. M. Darcet was sent to Sèvres to organize the works, with Closterman to superintend the composition of the colors. The products were confined to small pieces that could only be enriched

by light decoration, but the porcelain being made of the finest kaolin was of a brilliant whiteness. An inferior kaolin was introduced and Grellet resigned in 1785, when he was replaced by Alluaud, who sacrificed his private fortune to the improvement of the works. He was appointed Director of the Mint, and Massier provisionally succeeded him, 1793-5. The works were subsequently purchased by Messrs. Joubert and Cancate. In 1794 M. Monnerie established in the old Augustine convent at Limoges a manufacture which continued in operation till 1800, when it declined. Its products, without being *de premier choix*, were of good quality and enriched with light arabesque patterns. When M. Baignol left La Seinie (in 1793) he set up a manufactory on his own account, which was the most considerable at Limoges, with the exception of one set up in 1798 by Alluaud Pere, which was carried to great perfection by his son. Alluaud porcelain was distinguished for its whiteness, and the brightness of its enamal, the solidity of its paste and its careful decoration; the gilding and painting of flowers excellent, but in figures and landscapes its artists were deficient. Alluaud's products were sold in the towns of the south of France, and his manufacture, which rose in the storms of the revolution, was remarkable for the rapidity of its progress." Messrs. Gasnault and Garnier in their work on French pottery state that: "We do not believe that decoration was practised at Limoges, for all the porcelain manufactured there was sent to Paris in order to be painted. It is, moreover, not remarkable and is marked "C.D."in rough script—a mark the meaning and origin of which we do not know." Before the establishment of the porcelain industry Sieur Massie had a faïence workshop there, established by a decree of 1737. Specimens of his work are in the Museum of Sèvres and Limoges. The later history of Limoges will be found under the names of various present-day manufacturers.

LINDENIR. A celebrated painter of birds and insects who worked at Meissen from 1725 to 1745.

LINDOS, Island of Rhodes. It is to the researches of M. Salzmann, Consul of France, at Rhodes, that we owe our knowledge of the pottery of Lindos, established, according to all probability, by Heron de Villeneuve, twenty-fifth grand master of the order of St. John in Jerusalem from 1319 to 1346. According to the traditions gathered by M. Salzmann, a galley of this order, having captured a great Turkish vessel, made a number of prisoners, among whom were some Persians, workers in clay, with the aid of whom the chevaliers of St. John founded a pottery at Lindos, where the fine and pure sand of the shore furnished the base of a beautiful vitreous and transparent

enamel. This tradition is confirmed by a dish in the Musée de Cluny, on which a young Persian, Ibrahim, is represented with his eyes raised to heaven, and holding in his hands a tablet on which is a long inscription deploring the rigors of captivity. The decorations consisted chiefly of floral designs, sometimes treated naturally, but more usually in a conventional manner, but always with taste and perfect art. Besides dishes, which are relatively quite common, there were manufactured at Lindos vases, ewers, dishes and cylindrical cups with four handles, all showing the same characteristic decoration. A bright, brilliant red was freely used, and is typical of the pottery. After the conquest of the island by Soliman II. in 1523, the faïence industry was almost completely abandoned at Lindos, common works, coarsely decorated, giving place to the artistic works, though the same processes of decoration were employed as in the fifteenth century. The similarity in glaze and decoration of the Damascus wall tiles and certain dishes ascribed to Rhodes lead us to suppose that these latter should also be credited to Damascus, which was up to the seventeenth century the center of an important pottery manufacture.

LITHOPHANIE, china plaques, the figures being produced by the varying thicknesses of the paste—commonly known as transparencies. The process was invented at the Royal Berlin factory.

LIVERPOOL. This city was the seat of an important pottery industry early in the eighteenth century, when painted Delft ware was produced in considerable quantities, the art having spread from Lambeth to Bristol, and from thence to Liverpool. R. Chaffers & Co. were manufacturing china there in 1756, and Christian was engaged in the same business about ten years later. A contemporary of the latter was Seth Pennington, celebrated for his beautiful blue decorations. Toward the close of the century Richard Abbey started the manufactory afterwards known as the "Herculaneum" works, where both earthenware and china were produced, large quantities of the former being decorated with American designs, and a large trade with this country was done. Here also was established in 1750 the works of John Sadler and Guy Green, who first employed the process of transfer printing in pottery. Staffordshire manufacturers, unable to compete with the rapidity and cheapness of the new process, sent their wares to Liverpool to be printed, Wedgwood and his successors among the number, the latter continuing to have their ware printed there as late as 1799. Sadler & Green's works were on Harrington Street, at the back of Lord Street. The Herculaneum factory was closed in 1841 to make room for the Herculaneum Dock, and the industry no longer exists in Liverpool. At Birkenhead the Della

Robbia pottery was established a few years ago under most auspicious conditions.

LITTLER, WILLIAM, Longton Hall, Staffordshire, is credited with having been the first to use oxide of cobalt as a ground for salt glaze ware. He commenced business about 1745 and these blue glazed pieces may be assigned to between that date and 1750. He afterward made china, two specimens being authenticated by the handwriting of Enoch Wood and appear to have been made as early as 1752. From advertisements in the Birmingham newspapers we know that the business continued until 1758. The recognized specimens consist principally of plates and dishes having edges of vine leaves, and a rich blue is the prevailing decoration. A delicate scroll work in white enamel occurs on some pieces. Other productions were vases decorated with the rich blue before alluded to and adorned with flowers stuck singly and upright upon the rim. A small figure group is also known. The body was a vitreous frit similar to that used at Chelsea before the introduction of bones. It is probable that William Duesbury, of the Derby China Works, was at one time connected with the Longton Hall works. He is known to have resided at Longton Hall in the fall of 1755.

LONGTON HALL CHINA.

LOCKE & Co., Worcester, have within the last year or so commenced making china in imitation of the Royal Worcester. M 135.

LOCKER & Co., Derby, succeeded Bloor at the Derby works. (See Derby.)

LOCKETT, JOHN and TIMOTHY, made salt glaze ware at Burslem in 1786. In 1802 they removed to Longton. A J. Lockett is still in business there.

LOCRE, JEAN-BAPTISTE. He founded in 1773 the Manufactory de la Courtille on the Rue Fontaine au Roi. and made imitations of

German china, the factory from that cause being once known as "Manufactur de Porcelaine Allemand." To increase the resemblance he used as a trademark two crossed torches (A), which were afterward changed to two ears of corn (B). Toward the year 1784 Locre entered into partnership with Russinger, who afterward became sole proprietor. The work produced under Locre is extremely remarkable.

A B

LODI, Italy. According to several authors there were a number of factories at Lodi early in the seventeenth century, but their individual products cannot be recognized. Antonio Feretti was established there the end of the last century. The decorations on Lodi pottery usually consist of well-drawn figures, dogs, etc., almost always associated with a tree with an undulating trunk.

LONG, W. A. In 1892 Mr. Long established at Steubenville, Ohio, a small factory, the products of which are mentioned under the caption of Lonhuda. Mr. Long is a capable chemist and is now the president of the recently formed Denver China & Pottery Company, of Denver, Col.

LONGCHAMPS, near Dijon. Messrs. Charbonière have a large factory here which is run independently of the Comptoire Ceramique.

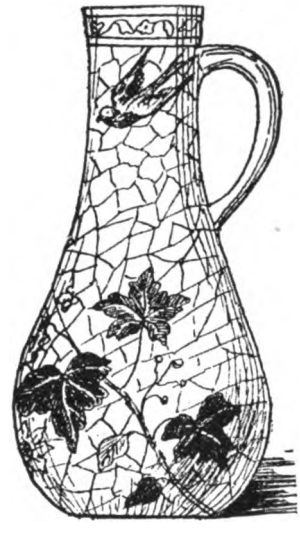
LONGPORT, Staffordshire. Longport, near Burslem, has long been the seat of some important pottery industries, the principal one of which was that of the Davenports. Phillips had also a stoneware works here.

LONGTON. One of the towns comprising the group known as "The Staffordshire Potteries." It is chiefly devoted to the manufacture of china, mostly of a low grade, though of late years the quality has perceptibly improved. It has also extensive majolica works. In 1891 the population was 34,327.

LONHUDA. A ware made in imitation of Rookwood at Steubenville, Ohio. The name is derived from the names of the original promoters: W. A. (Lon)g, W. H. (Hu)nter, Alfred (Da)y. The business was purchased in 1896 by Mr. S. A. Weller. M 136.

LONGWY. The industry here was established by the Boch Frères toward the end of the last century. About 1839 it passed into the hands of D'Huart de Northcomb, and is now D'Huart Frères *Email craquele* was a distinguishing feature and brought the works into prominence. Colored stanniferous enamels of great brilliancy were employed, giving very effective and striking results. This

crackle ware has lately been abandoned, or produced very sparingly, but they have yet to demonstrate their ability to produce something as strikingly original and with as much individuality as the *email craquele*. A few staple goods are also produced here.



LONGTON HALL. (See William Littler.)

LOOSDRECHT, near Utrecht. China was made here in 1772.

LORD'S PRAYER. A clay tablet written in uncial Greek letters, forming part of the Lord's prayer, has recently been discovered in Greece and is now in the Athens Museum. It is about four inches square, forming probably about one-quarter of the complete tablet. It is of a reddish brown color and is interesting as showing the spread of Christianity as early as the third or fourth century, and as being the oldest example of pottery referring to Christianity.

LORETTO. The Italian majolica presented to the Santa Casa at Loretto are of historic interest. Duke Guidobaldo II., a great patron of the ceramic art, with a view of improving the character of the designs, bought for the use of the Urbino artists original drawings by Raffaelle and engravings of Marc Antonio from that master's designs. Some of these were executed by Orazio Fontana and were subsequently presented by Duke Francesco Maria II. to the Santa Casa. Among the subjects in this collection may be mentioned the four Evangelists, the twelve Apostles, incidents in the Old Testament, naval battles of the Romans, and the Metamorphoses of Ovid. On eighty-five of them are portrayed the games of children, every subject different. A Grand Duke of Florence offered for them a like number of silver vessels of equal weight, and Louis XVI. offered for the four Evangelists and St. Paul an equal number of gold statues. Mr. Fortnum expresses himself as a little disappointed on seeing the collection, which "did not strike him as being of such extraordinary beauty and great artistic excellence as the high-flown eulogy bestowed upon them by some writers would have led him to expect."

LORETTO, Italy. In the seventeenth century there was made for the Convent of Loretto, probably at Castel-Durante, faïences representing the Virgin and Infant Jesus, bearing the inscription *con-pol-di-s. casa* (con volvere di Santa Casa). These faïences, of which some specimens exist, were made, it is said, of earth in which was

mixed dust from the garments of the Virgin and the walls of the sanctuary. The convent placed underneath these its seal in red wax, and they found a ready sale to pilgrims and others.

LORRAINE, TERRE DE. By this name are designated the white faïences, particularly busts, statuettes and groups, either in biscuit or white enamel, which were made in the latter half of the last century at Luneville, St. Clement, Bellevue, near Toul, Niederwiller, etc., for which models were made by Cyffle, Lemire, Guibal and other less known artists. Many of these with the words "Terre de Lorraine" impressed in the clay came from Luneville. Some of these statuettes, etc., are reproduced to-day by certain manufacturers from old and worn-out molds, but do not give much idea of the charms of the originals.

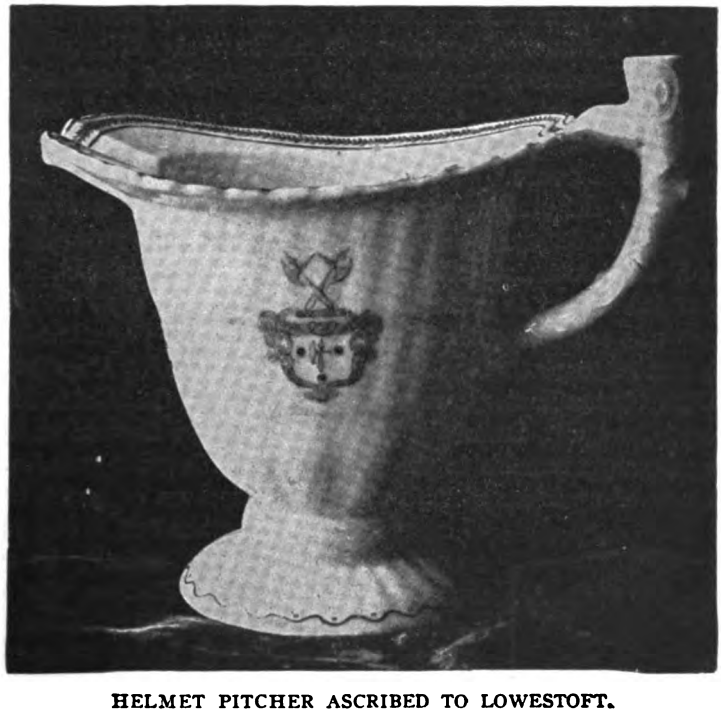
LOW ART TILE COMPANY, Boston. The manufacture was commenced at Chelsea in 1879. Their first success was tiles made from natural objects, leaves, grasses, etc., forming the molds from which a matrix was made. But to produce the tiles themselves it was necessary to reverse them, and after much experiment it was found

that by placing a piece of tissue paper over the matrix and pressing the dust on that the pattern for a perfect die was obtained. It was in their high relief work, however, that the Lows made their most marked advance. What successes had been attained in this direction were made from molds with wet clay, the immense loss resulting

from attempts to make them by the dust process having proved an insurmountable obstacle. But Mr. Low, by a simple device, overcame the difficulty, and high relief tiles are made at Chelsea as easily as any others. The arched panel of which we give an illustration is a detail from the magnificent soda-water fountain exhibited by the Messrs. Low at the World's Fair.

LOWESBY, Leicestershire. A terra-cotta manufactory existed here from 1835 to 1840.

LOWESTOFT. Probably no china ever made has led to such interminable controversies as Lowestoft. Some writers do not hesitate



HELMET PITCHER ASCRIBED TO LOWESTOFT.

to affirm that no china was ever made there. Its situation on the east coast of England, far removed from the clay and coal supply, is the first argument advanced against its existence; but in this respect it was no worse off than Chelsea. Mr. Lewellyn Jewett, than whom there is no better authority on English pottery, is of the opinion that an extensive trade was carried on by that port and Holland. Its first potters were from Holland, and made the ware from clay found in the neighborhood. Specimens of this Delft ware, dated

from 1752 to 1760, with the names of various persons resident in the neighborhood, are in existence. After this latter date all specimens ascribed to Lowestoft are china. Gillingwater, in his history of Lowestoft, written in 1790, says that "The only manufacture carried on at Lowestoft is that of making porcelain or china ware." The employment of the two terms is worthy of notice. He proceeds to say that in 1756 Hewlin Luson, of Gunton Hall, found some clay on his estate, and sent it to London to be tested; and was so far encouraged that he decided to experiment with it on his own premises, and hired some potters from London, erecting upon his estate a temporary kiln, etc. The manufacturers of London, he states, bribed the workmen to spoil the ware, fearing from the nature of the clay that he might prove a formidable rival. "Notwithstanding this unhandsome treatment, the resolution of establishing a china manufactory at Lowestoft was not relinquished, but was revived again the next year (1757) by Messrs. Walker, Brown, Aldred and Rickman." This second attempt met the same fate as the first, but the practice being discovered "they took such precautions as to render every future attempt of this nature wholly ineffectual, and have now established the factory upon such a permanent foundation as promises great success." In 1770 the manufactory was represented in London by a depot for the sale of their ware, and we know that the address as furnished to W. Duesbury, of the Derby China Factory, was "Robert Browne & Co., China Manufactory, Lowestoft, Suffolk." Of this first Robert Browne an interesting example remains in the possession of his great-grandson in the shape of an inkstand with nine sides, on seven of which it has Chinese figures, the other two being taken up with the initials "R. B., 1762." In 1775, under the second Robert Browne, the ware must have attained a degree of excellence and attracted the attention of Josiah Wedgwood, the purchase of a specimen by him being attested with documentary evidence. The names of painters employed at Lowestoft are well known, among them Robert Allen, who remained until the close of the factory in 1803. Up to 1789 the decorations were entirely in blue, when they gave way to a finer and higher class of goods. The rose is one of the most frequent decorations on this latter class, probably from the fact that the Tudor rose is a part of the arms of the borough, and that a painter named Rose during

the French Revolution found his way there, and was engaged by the company. Of the real Lowestoft china there are but few well-authenticated examples. Of the Oriental porcelain decorated there,

LOWESTOFT CHINA SHOWING THE ROSE DECORATION.

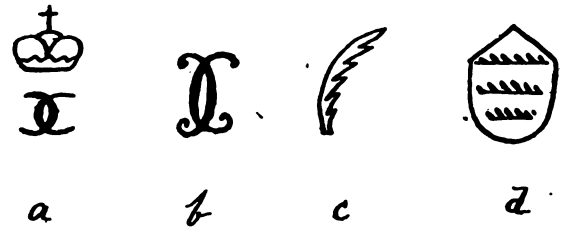
or elsewhere, and ascribed to Lowestoft the number is legion. Unfortunately, no mark was ever used at Lowestoft, so each collector must be an authority to himself, and decide from the character of the specimens whether they were decorated at Lowestoft or not. As to whether the paste is Oriental or not, that he should have no doubt about whatever. The works were closed in 1803 or 1804, the successful competition of the Staffordshire houses, the failure of the London agent, and the destruction of a large quantity of their ware in Holland during the invasion of Napoleon, all tending to make such a step imperative.

LOYAL, CHARLES. (See Luneville.)

LUCA DELLA ROBBIA. ("Made work in clay as it were eternal." —*Vasari.*) Born about 1400, he commenced life as a goldsmith, afterward becoming a sculptor. His biographers differ as to the reason that induced him to turn his attention to pottery, one stating that it was a desire to accelerate his work to enable him to execute his numerous orders; another, that he was searching for a material that would give him a more lucrative return than the slender profits

he realized from his work in marble. That he should, having had no practical experience as a potter, invent an enamel of surprising beauty is hardly to be credited; but, having gotten his inspiration from some potter or pottery, that he considerably improved its composition is much more likely. M. Jacquemart surmises that it was at Caffagiola that he learned the nature of this enamel, and that its use was known in Italy previous to its application to sculpture by him—a view concurred in by Mr. Robinson, though it is worthy of note that no dated specimens of either Faenza, Caffagiola, or Pesaro bear an earlier date than Luca's known works. His first production—a bas-relief representing the Resurrection—was made about 1443, and is executed entirely in white on a blue ground. He subsequently introduced other colors, his second work, the Ascension, executed in 1446, containing green with a few touches of maroon and yellow. The churches of Florence are eloquent of his genius, the Duomo, Or' San Michele, San Miniato al Monte containing fine specimens of his work. He also used enamel colors for painting on the flat, and there are at South Kensington twelve circular plaques about twenty-two inches in diameter painted by him with figures of husbandry typical of the months of the year. Luca died in 1481, and the work initiated by him was continued by his nephew, Andrea. The simplicity and purity of style of Luca della Robbia are remarkable, his enamel of peculiar whiteness and excellence—qualities his successors have been unable to attain.

LUDWIGSBURG, Würtemberg. Ringler, under the auspices of the reigning duke, Charles Eugene, started a china manufactory here



in the ancient royal palace in 1758. Well-modeled groups of figures, and dinner and tea services and vases, all very finely painted, were produced. The situation was badly chosen, the clay having to be procured from France and the fuel from a long distance, but it was not finally closed until 1824. Its productions are equally well known as Kronenburg. The marks employed were from 1758 to 1770 a crown and the initials T. R.; from 1770 to 1806 the double C for

Charles and a crown (*a*); to 1818 the same without a crown (*b*), and afterward W. R. with a crown. At a later period a single stag's horn (*c*) was used, and also three stags' horns on a shield (*d*), the arms of Wurtemburg.

LUNEVILLE. Founded in 1729 by Jacques Chambrette. The styles of Rouen and Strasburg were followed, and the factory soon became one of the most important in Lorraine. The business grew to such proportions that Chambrette soon had to build two other factories, one at Luneville and the other at St. Clement, six miles distant. King Stanislas was a patron of the works, and when in 1758 Chambrette died and the business passed to his son and his son-in-law, Charles Loyal, the King confirmed the privilege already given, and conferred on the Luneville Pottery the title of "Manufacture Royale." About 1772 the prosperity of the factories began to decline. Chambrette became bankrupt, and the management of the three factories devolved on Loyal. In the St. Clement factory he gave an interest to Cyffle, the sculptor, but his means were not sufficient to carry on the business, and he sold the two Luneville establishments to Sebastien Keller, March 4, 1786, to whose direct descendants they now belong. Loyal continued the St. Clement factory for some time, but had soon to give it up to his creditors. Companies were formed at different times to keep going this once prosperous faïence manufactory, and in 1824 it fell into the hands of Germain Thomas, under whose intelligent directorship the adverse tide was turned. It remained in his family until 1892, when it was purchased by Keller & Guerin, a son of Mr. Thomas continuing as director. These three factories produced a large quantity of stanniferous enameled faïence of elegant and varied shapes, decorated in colors after the style of Strasburg, or simply in blue and gold. Luneville produced large faience pieces representing lions or fierce-looking dogs, and it became the fashion to place one of these on each side of the door, which gave rise to the French proverb, "*Se regarder comme des chiens de faïence*" (to stare at one another like crockery dogs). The Luneville potteries owe much of their prominence to the sculptor, Charles Cyffle, who supplied the models for those charming statuettes in biscuit which, under the name of "terres de Luneville," attained such a wide and deserved popularity. Cyffle was born at Bruges January 6, 1724, and was barely seventeen when he came to Paris to learn from his uncle (who, like his father, was a goldsmith) the art of working metals. After having spent five years in Paris he was in 1746 summoned to Luneville, where he

was entrusted with several important works by Guibal, sculptor to King Stanislas. But his original and naïve talent was ill at ease when dealing with large allegorical figures or historical bas-reliefs, and he soon abandoned them for small faïence statuettes. "Utterly uneducated, lacking useful knowledge, and, unfortunately, rather inclined, especially in his youth, to frequent the wine-shops, he was at his best when dealing with familiar subjects, and reproducing popular scenes and types, the real and picturesque side of which he was unequaled for observing and rendering in the happiest and most humorous mood. His knowledge of modeling, truthfulness, skill and delicacy of touch were essentially typical and personal, and imparted value to his least important works." His profligate and wild life prevented him acquiring the competence his talents entitled him to, and the sculptor whose work was so eagerly sought, the director and even owner of several factories, was obliged to leave France, and died at Bruges in 1806 in obscurity and poverty. Although he furnished models to other factories, those made at Luneville are most esteemed, and the greater part of his models were made for that establishment. Several other factories made casts from the Luneville figures, notably at Bellevue. The Luneville pieces are sometimes impressed in the clay "CYFFLE A LUNEVILLE." Among the most remarkable of his works may be mentioned "The Cobbler Whistling to His Starling," "The Savoyard Chimney Sweep," "The Gardener and His Wife," and such like subjects. Mr. Keller was fortunate enough to be able to weather the storms at the close of the last century, which resulted in the almost total annihilation of the French faïence industry. He had already, however, extended the scope of his manufactures, developing a higher class of ware—a development increased rather than diminished by his son, the present proprietor, and his partner, Mr. Guerin. The children of these, and then their grandchildren, who were the actual proprietors, continued to develop this interesting industry, of which the products are to-day sold in all parts of the world. The present productions of Luneville are extensive in their variety, ranging from cheap plates and bowls to those beautiful specimens of a rediscovered art known as *reflets metalliques*. Some pieces of the ware are surprisingly charming, for the iridescence shows only at a certain angle of light, and while you are admiring a sheen of silver or gold a slight movement of the piece in your hand displays an entirely new

coloring and effect. Reproductions of old ware, vases with flowers painted in the clay, with a soft, luscious glaze, and a varied collection of ornamental goods, in which pieces of heroic size predominate, are a few of the firm's many productions. M 137.

LUSON, HEWLIN. (See Lowestoft.)

LUXEMBURG. The Brothers Boch established a factory here in 1767. (See Villeroy & Boch.)

LYMAN, FENTON & Co. (See United States Pottery, Bennington, Vt.)

LUSTER. The decoration of pottery with metallic lusters has a very remote antiquity. It appears to have been established in Persia at a very early period; has been found on specimens from Arabia, where its use may have preceded the manufacture by the eastern potters of the Balearic Islands, Spain and Sicily. In Italy its use was known before that of stanniferous enamel, the mezza-majolica of Pesaro and Gubbio being brilliantly lustered. The most beautiful was the "madreperla," which changed in color and effect with every angle at which the light is reflected from the surface. About 1560-70 their use was almost discontinued and the secret of their composition was lost during the general decline of Italian artistic character. After a considerable lapse of time the secret was rediscovered by Doccia, but the best pieces were made at Gubbio itself by a young artist and chemist, Luigi Carocci. Later they were successfully produced at Luneville and Gulf St. Juan. The disappearance and reappearance of these lusters are in themselves remarkable, but perhaps the strangest part is the fact that the Indian potters of Mexico have been and and are to-day producing a luster which Mr. Prime considers "incomparably finer than any metallic luster ever produced in Europe, and which if potters can by experiment learn so to use it that different colors can be produced as desired will practically restore to modern uses the lost Saracen and Italian lusters." I think it was Mr. Dudley Warner who first brought specimens home and brought them to Mr. Prime's notice, and a year or two afterward a commission was sent out to inquire into its manufacture, which reported in due course. A specimen in my possession is of a pale buff body with stamped ornaments showing in various lights iridescent ruby, a brilliant emerald green, and gold. The report was not of a satisfactory character, but, if correct, varies from

MEXICAN INDIAN LUSTER WARE.

the European method, where various metallic oxides are employed, whose partial decomposition leaves a beautiful metallic deposit.

LYONS. Italian workmen introduced into Lyons the potting industry, and Italian styles generally prevailed. We have knowledge of Sebastian Griffo of Genoa in 1556; of Jean François of Pesaro a little later; of Julien Gambin and Domenico Tardessir of Faenza, who obtained letters patent from Henry III., but then all information ceases until 1733, and the production seems to have been confined to white ware. In this year letters patent were granted to Joseph Combe, of Moustiers, and Jacque Marie Ravier, who founded a manufactory with the title of "Manufacture Royale de Fayence." The style of Moustiers was imitated and the borders exactly copied. The manufactory was continued by Madame Lemalle and later by her son-in-law, François Joseph Patras. It probably ceased to exist in 1758. There were also at Lyons several other manufactories up to the end of the eighteenth century whose productions were of no special value. Some rather fine, of yellowish white enamel, bear the letters I. P. S. They are dated from 1773 to 1776, but the name of the manufacturer is not known. From 1789 to 1792 there were made at Lyons coarse faïences of polychrome decorations, representing personages and events of the time.

M

MACHELEIDT, a young chemist and student of Jena, experimented at Rudolstadt to discover the secret of porcelain. He made a ware resembling it, the chief ingredient of which was a local sand, and continuing his experiments he perfected the body and received from the Prince of Schwarzburg permission to erect a factory at Sitzerode, which was in 1762 transferred to Volkstadt. These Thuringian factories are additionally interesting as being independent of Bottger's discovery at Meissen.

MCLAUGHLIN, M. LOUISE, Cincinnati. Miss McLaughlin, after experimenting in colored clays, etc., has now turned her attention to porcelain in the small pottery on the grounds of her residence. At the Buffalo Exhibition she demonstrated that she had succeeded in producing a very good body, and showed some very well conceived and executed pieces.

MACQUER, chemist at the Sèvres factory, who introduced the manufacture of hard porcelain in 1769. (See Sèvres.)

MACQUOID, W. A. & Co. (See Hudson River Pottery.)

MADDOCK, JOHN, & SONS, Trenton, N. J. Established in 1896 as manufacturers of sanitary ware.

MADDOCK, THOMAS, & SONS, Trenton, N. J. This, one of the oldest establishments in Trenton, was founded by Millington & Astbury in 1853, and was the first pottery in America to make sanitary ware. In 1872 Mr. Thomas Maddock joined the firm, which became Millington, Astbury & Maddock. This in turn gave place to Astbury & Maddock, and finally Mr. Thomas Maddock conducted the business alone until 1882, when the present firm was founded. In addition to sanitary ware, a large business is done in druggists' sundries, dinner and toilet ware and a number of specialties. The mark is an anchor and the initials T. M. and S.

MADDOCK POTTERY COMPANY, Trenton, N. J. This concern was organized in 1893. The plant formerly occupied by the Trenton China Company was purchased, and the young firm quickly developed such ability as to place them at once in the front ranks of American manufacturers. In addition to a line of dinner, tea and toilet ware, they turned their attention to jardinières, pedestals and umbrella stands, in which some very rich and artistic designs and colorings have been produced. To demonstrate their ability to produce goods equal to those of the Old World, a Doulton punch bowl was reproduced, and it is a fact that the late Mr. Mawdesley, the representative of Doultons in this country, on being shown some of these bowls, insisted that they were genuine Doulton, and would not be convinced to the contrary until he saw the Maddock mark underneath. This was a very decided, if unintentional, compliment to the young men. The president is the veteran potter, Mr. Thomas Maddock; vice-president, Mr. Thomas P. Donoher; treasurer, Mr. A. M. Maddock; secretary, Mr. E. D. Anderson. Mr. C. A. May is the art director and designer and is also a member of the firm, as are also Mr. H. S. Maddock, Mr. C. S. Maddock, and Mr. M. Callear, the general manager. M. 137 A.

JAMES MADDOCK.

MADDOCK, JOHN, & SONS, Burslem. John Maddock, the founder

of the firm, commenced business in 1830. At an early date his attention was directed to this country as a market, and his son, John Maddock, Jr., spent several years here opening up a business, the result of which was reaped by his brothers, Thomas and Henry, who succeeded him. Another brother, James Maddock, is now the head of the house, and is the only surviving son living in England. A man of keen business intellect, he has devoted all his energies to make Maddock ware synonymous with all that is good in household pottery; and wisely confining himself to this one special production, which he could well keep under his own special supervision, he has succeeded in producing a body which may well be regarded as a standard of excellence. Upon the death of John Maddock, Jr., his son, John Francis, was admitted as a junior partner by his uncle. M 138.

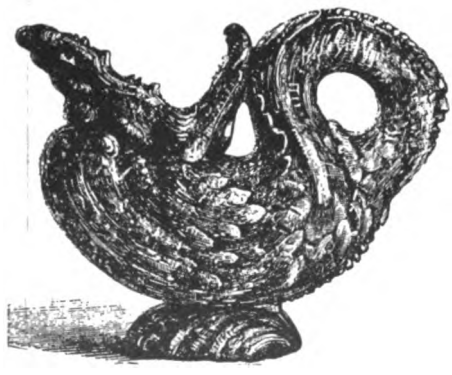
MADREPERLA. (See Luster.)

MADRID. (See Buen Retiro.)

MAESTRO. A title conferred in Italy on several painters of majolica, elevating them to the patrician order. Piccolpasso states that the majolica painters were noble by profession. The title of Maestro was prized even more than nobility. The best known of those so honored was Giorgio Andreoli, of Gubbio.

MAGISTRATES' PORCELAIN. (See Kouan-Yao.)

MAJOLICA. The glazed earthenware of Italy was originally termed majolica, or maiolica, the word being probably derived from the Island of Majorca (*q. v.*), with which the Italians had frequent intercourse dating from the twelfth century. Later, a distinction was made between the early wares painted and lustered on a white slip, which was termed mezza-majolica, to distinguish it from the later ware with stanniferous enamel, also painted and lustered, which was designated simply as "majolica." Both appellations, it will be noticed, applied only to ware showing *reflets metalliques*, and this limited use was continued until about the middle of the sixteenth century. Later, the use of the word widened so



GROTESQUE MAJOLICA EWER, SIXTEENTH CENTURY.

that in Italy all glazed earthenware was called majolica. With the decline of Italian art the word fell into desuetude, until revived the middle of the present century in England as applied to wares covered with transparent colored glazes on a buff or cane-colored body. It is now applied indiscriminately to anything with a colored glaze.

MAJORCA, the largest of the Balearic Islands, had as early as 1442 an extensive trade in pottery with various Italian towns; and this probably accounts for the fact that the bulk of the Hispano-Moresque pottery specimens have been found in Italy. The site of the manufactory appears to have been the small town of Yuca, some leagues from Palma, the capital of the island. There is a plaque in the Musée de Cluny and another in the British Museum bearing the arms of this town. They probably date from the fifteenth century.

MALAGA, Spain. In all probability it was at Malaga, about 1320, that the celebrated vases were made which decorated the Alhambra at Grenada, and are justly considered the most remarkable monuments of the ceramic industry of the Moors in Spain. The faïences of Malaga were renowned from the beginning of the fourteenth century, at the time when Ibn Batautab, of Tangiers, visited Grenada, and wrote: "There are made at Malaga the beautiful pottery or gilded porcelain that is exported to the most distant countries." Faïence manufactories existed here in the sixteenth century, and several chroniclers, among others Lucio Marineo, in 1517, speak of the "very beautiful faience vases" produced in this town. The general coloring of Malaga faïence is two shades of blue enhanced by metallic luster of the coppery hue that so richly decorates all Hispano-Moresque faïences.

MALING, C. T., & SONS, Newcastle-on-Tyne, make a general line of earthenware, one of their specialties being potted meat pots. The works were originally established by C. T. & John Maling at North Hylton, near Sunderland, in 1762. The works were removed to Newcastle by Robert Maling in 1817. These were much enlarged by his son, C. T. Maling, in 1859, and another factory added to them in 1878. Mr. C. T. Maling died July 20, 1901. His three sons continue the business. M 139.

MALPAS, WILLIAM, in 1765 was the proprietor of the works at Swinton afterward known as the Rockingham Works.

MANARA, BALDASARA. An artist of Faenza.

MANARDI. The sisters Manardi established a manufactory at Bassano, Italy, of whose product little is known. Sixteenth century.

MANDARIN VASES. All public functionaries in China are called mandarins, and the vases named after them include all those with toque and vest, the nine orders being distinguished by minute regulations affecting the positions of the buttons on the toque, the squares on the coat and the decoration of the belt. The costumes belong to the Tartar dynasty and probably date early in the seventeenth century. M. Jacquemart ascribes these to Japanese origin.

MANGHETTI & SON, Bologna. Their reproductions of Luca della Robbia bas-reliefs are excellent, and the whole of their productions are marked by a fine artistic individuality. Large busts, excellently modeled, founts, and a variety of ornamental pieces, all brilliantly painted on a tin glaze, but without the garishness which too often mars Italian pottery, give a delightful sense of originality. The mark is often painted on the decorated surface. M 140.

MANISES, Valencia, Spain. Beautifully gilded and painted faïence was produced here of such quality as to call forth from an old author the expression that they had enraptured the whole world to such an extent that dukes, cardinals and princes sent their orders there. It was at Manises that the manufacture of azulejos was commenced. The use of copper luster has continuously existed here, evidence of which is furnished by an English writer under date of 1780, by a German in 1801, and finally by the Baron Davillier, who relates that a simple innkeeper occupied his leisure time in the manufacture of gilded faïence with the most primitive appliances. His wife was the sole decorator, the pieces being principally cups, plates, etc., the decoration being a dull copper luster, with the exception of the cups, on which the luster is more brilliant. These cups were used to test the quality of the wine, which according to its limpidity allowed one to see more or less of the reflection at the bottom of the cup.

MANOR HOUSE, York. (See Place, Francis.)

MANTUA. The manufacture of Italian majolica was introduced here about 1450, though little or nothing is known of it.

MANUFACTURE OF POTTERY. Clay is by no means the sole ingredient of pottery, nor is this even its principal use, as there is more clay used in the adulteration of fabrics than in the manufacture of pottery. Savage tribes were not long in discovering that some other substance was needed to make the clay retain its shape during the firing, and used ground shells, etc., for the purpose. Different bodies are obtained by many different mixtures, or the same mixture in different proportions. Some of the ingredients used are china clay or kaolin, which, in conjunction with china stone, or

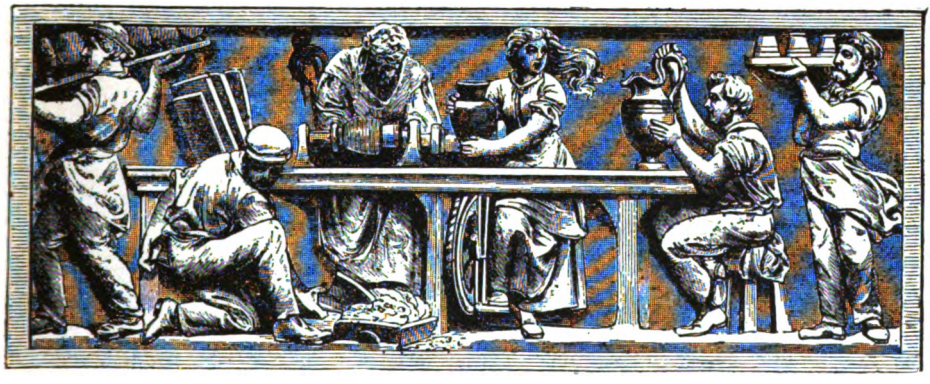
petunste, forms porcelain—the simplest form of pottery—or gives purity to an earthenware body. Ball clay is used as a base, and gives plasticity; flint whitens, strengthens and solidifies; and feldspar (orthoclase) gives translucency, as also does china stone. Bones, which were first used in Bow porcelain, hold up the ware and enable it to stand the great heat of the kiln. Glazes are made from soda, potash, borax, etc., mixed with clay and flint, and are mixed together into a hard glass called frit. This is then ground in water, and white lead, china stone, tin, etc., added. A successful potter must know the chemical properties of all these materials, alone and combined, so that there may be perfect agreement. Having carefully weighed his materials, they are put together in a circular tank called a blunger, in which is an upright shaft with a number of arms which constantly revolve until the mass, with the addition of water, is of the consistence of cream. It is then called slip. This slip undergoes a series of cleansing processes, passing through thick bolting cloth and under powerful magnets (to remove any particles of iron) and through a filter press to remove the moisture. But before being ready for the potter it must go to the pug mill, where it is cut by knives and forced through a small aperture so as to remove any air bubbles. This process was formerly done by men trampling the clay under foot, and is still practiced in France when an extra quality of body is required. It is now ready for the thrower or presser. The wants of the latter have been anticipated by the modeler and the mold maker. The modeler, having made a careful drawing, proceeds to reproduce it in clay especially prepared for the purpose, and this model is then cut up into pieces, which are given to the mold maker, who, pouring around them liquid plaster, makes an exact reverse of each piece. These, when joined together, form the complete mold. The clay, having been weighed, is passed to the thrower, who places it on his wheel, and under his skilful manipulation assumes the desired shape, the clay revolving rapidly, seemingly endowed with life, and following the slightest change of his hands. Should the wheel have been superseded by the jigger, a thin bat of clay is placed in the mold, which is put on the jolly, and while rapidly revolving the workman presses a tool of proper form, which is attached to an iron lever called a "pull-down," on it to shape the back of the plate or dish, or the inside of the cup or bowl. The mold is then taken away and placed to dry. Being made of plaster-of-paris, it absorbs the moisture in the clay, the article dries and shrinks proportionately, and is easily removed. Cups, etc., are passed on to the turner, who rounds the tops and smoothes them with

a flat steel tool. Hollow pieces which from their shapes can neither be turned nor jollied, such as covered dishes and tureens, are made by clay being pressed into a mold made in two or more sections, and are called pressed goods. Each section of the mold is lined with a bat of clay, which is carefully smoothed with a sponge and a hard piece of rubber. The sections are then fitted together and held in position with a leather strap. A roll of clay is placed on the outside seams and the mold is put away to dry. Handles are molded separately and fixed on by dipping the ends in slip. When the piece is taken from the mold the seams are rubbed down and it is put in the "green room" for further drying until it is ready for the oven. Or the piece can be formed by casting. In this case the mold is placed in shape and bound together with straps, and liquid clay

PAINTING. BAS-RELIEF FROM WEDGWOOD INSTITUTE.

(slip) is poured in. The plaster mold absorbs the water and leaves a layer of clay adhering to the walls of the mold. When this is of sufficient thickness the remaining slip is poured out and the mold put to dry. At the proper time the mold is taken apart and the work taken out. Pottery ovens are built of red brick and lined with fire brick, and are usually about sixteen feet inside diameter and sixteen feet to the roof or crown, above which the oven rises to a sufficient height to give draught to the fires. Around the base are the ten or twelve furnace openings which connect with the flues built under the floor and around the walls of the oven. The ware before being placed in the oven is arranged in saggers—a sort of box of various shapes made of common clay. White sand is used in which to bed the pieces so that they may retain their shape. When the sagger is filled a roll of clay is placed on its edge to exclude the dust and

smoke, another sagger is placed on top of it, and the operation repeated until a tier or "bung" reaches the top of the oven. When the oven is filled with saggers the opening is bricked up and plastered with clay mortar. The firing then commences and lasts about forty-eight hours, a heat of about 3,000 degrees Fahrenheit being reached. The fires are allowed to die away, and after cooling for about three days the ware is taken out. Having reached the biscuit state, the ware is now ready for decorating or glazing. Printed decorations can be applied either before or after glazing. In England all prints are done on the biscuit; in America usually on the glazed ware. For the printer much preparatory work has been done. An artist has carefully made the design, which has been engraved on a copper plate with great nicety by the engraver. This plate the printer places on



BAS-RELIEF FROM WEDGWOOD MEMORIAL INSTITUTE.

his stove to get warm, and then charges it with color mixed with a very thick oil. After removing the surplus color with a knife and boss, he takes a sheet of fine tissue paper, makes it thoroughly wet in a solution of soap and water, and places it on the engraving. On this he lays a piece of printer's blanket and passes the whole between rollers. The impression thus taken is handed to a cutter, who cuts away the superfluous paper and passes it on to the transferrer, who places it in the required position on the ware and rubs it with flannel until it adheres properly. The paper is soaked off by immersion in water, and the ware sent to the "hardening on" kiln to remove the oil. If this printing has been done on the biscuit it is now ready for glazing. The dipper, standing by a tub filled with glaze, takes a piece in his hand, immerses it in the liquid and hands it to a boy, who places it on a board. It is then taken to a "glost" oven. Great care

has to be taken in placing the ware for this firing, and small triangular pieces called stilts and spurs are used to prevent the pieces touching each other. This firing occupies about twenty-four hours. Should the ware require gilding it is taken to the workshop and the gold applied, and it is then fired for six or seven hours in an enamel kiln. Mineral colors alone can be used in "filling in" the printed patterns or otherwise painting on pottery, the value of the work depending on the ability of the artist, just as it does in oil or water colors. But the ceramic artist has this advantage: his work is absolutely permanent, and as it comes out of the kiln so it will exist for all time.

MARANS, near La Rochelle. A manufactory of faïence was founded here in 1740 by Pierre Roussencq, of Bordeaux, who in 1749 became associated with two merchants of La Rochelle, but in 1751 the partnership was dissolved, the business not proving a success, and a part of the material was transported to La Rochelle. Here one of the partners started a new manufactory. The works at Marans continued to exist, but only produced after the death of Roussencq, in 1756, extremely common faïence. The ware was in the styles of Rouen and Strasburg. These latter are recognizable by their vivid colors and the intensity of the purples. They are mostly marked with the letters M. R. accompanied by a number or a letter.

MARBLED WARE. Early in the eighteenth century the common ware was decorated with marbling. While the clay was still wet lines of brown clay were poured on it and then with a many-pointed tool of wire or leather, similar to those used by grainers, they were combed down to imitating marbling. Different colored clays were also blended together to produce the effect of marble. (See Agate ware.)

MARCOLINI, COUNT, director of Meissen from 1774 to 1814. (See Dresden.)

MARIANA, GIAN MARIA, had a fabrique at Urbino about 1530.

MARIANA, SIMONE DI ANTONIO, a painter of majolica at Urbino about 1542.

MARIEBURG, Sweden. This factory, situated in the environs of Stockholm, was founded in 1758 by Louis Ehrenreich, under the patronage of Charles Frederick Scheffer one of the richest and most influential men of the court of Sweden. He obtained for it the title of Royal Manufactory, and it soon attained distinction. The products were similar to those of Rorstrand, Niederwiller and Strasbourg. In striving for originality some of the shapes became bizarre, as, for instance, a soup tureen in the form of a bishop's mitre. The English

printing process was adopted in 1765. The works were closed in 1780 and the stock sold at auction. M 141.

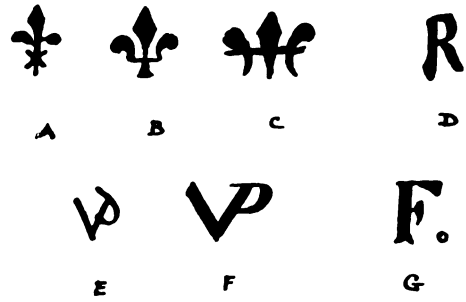
MARIGNAC, France. A faïence manufactory was established here in 1737 by M. De Lafue. It existed until the end of the last century, though little or nothing is known of the character of the products.

MARINONI, SIMONE, founder of a pottery at Bassano about 1540.

MARKS AND MONOGRAMS. It is only natural that both for business and personal motives the potter should affix his sign manual to his work. The Greeks were in the habit of doing so, and the practice has continued through successive ages. The practice has been abused, their importance is to-day probably overrated, yet without them our knowledge of the history of pottery would have been very incomplete. Had Lowestoft china been marked there would not to-day have been the erroneous impression there is about it. But the value of the article from an artistic point should determine its value—not the trademark at the back. (See also Forgeries.)

MARSDEN TILE CO., Burslem. Mr. E. Marsden, the originator of this company, is the patentee of several radical departures in the manufacture of tiles. He introduced the tiles with beveled edges, fitting the one to the other so as to make it impossible for them to drop out when fixed on walls, etc.

MARSEILLES. The faïences of Marseilles, decorated on the glaze, certainly merit to be classed among the most beautiful productions in



French ceramics of the last half of the eighteenth century. A rare series of plates, painted with marine subjects in rose, rival the works of the best porcelain painters of that time. Of the nine manufactories in activity about 1770, those whose products deserve special note are, first, that of Honore Savy, who, after the visit made him in 1777 by M. Count de Provence, took the title of "Manufacture du Monsieur frere du Roy," and adopted as his mark a fleur-de-lys (A, B, C). Savy was the first to employ a beautiful transparent copper

green, characteristic and peculiar to Marseilles, often used to fill in patterns, the outline and modeling of which were strongly traced in black. Second, the manufactory of Joseph Robert, from which there comes a great number of services decorated with insects, flowers and shell work. A piece marked "Robert et Etien a Marseilles" leads us to suppose that Robert at some time had a partner. His marks was either the letter R (D), or "Robert a Marseilles" in full. Third, that of the widow Perrin, who seems to have been the most important. Her mark was V P in monogram (E, F). Fourth, that of Jacques Borelli, who was probably of Italian origin, and whose family for a long time preserved a manufactory at Savona. His faïences are signed in full "Jacques Borelli." Sometimes we meet with pieces decorated with flowers, insects and shells marked F (G), which in the absence of certain proof may be attributed either to the widow Fesquet or to Fauchier, both names being found in the "Guide Marseillais."

MARTIN, R. W., & BROTHERS, Southall, London. This firm is composed of four brothers, who commenced making the ware which bears their name in 1872 at Fulham, their products being fired at the historic pottery made famous by Dwight. In 1879 the present kiln was built at Southall. But very few hands are employed, the work being practically all done by the four brothers from the mixing of the clay to the firing of the ware. The ware is a salt glazed stoneware and is disposed of principally to private individuals. The decorations are mostly engraved, carved or modeled. The treatment

is very varied in form, decoration and color. The ware is not burned in saggars, so the fire plays with it very considerably and therefore but little dependence can be placed on getting always the effect sought for. Such in effect is the modest statement of these four artist potters, who have achieved a success so great that their work stands absolutely alone. It is not possible in black and white to give any idea of the harmonies of color, always in subdued tones, of the sense of absolute repose and perfect satisfaction these pieces of stoneware impress you with. To experience that, you must see and handle them, for no lover of ceramics would be satisfied with seeing them alone. An owl tobacco jar, the head forming the cover, instances two important characteristic points, workmanship and color. It is true the latter consists of but greens and browns, but when the cover is removed and replaced in a different position and you have the idea conveyed to you that the owl has turned its head round, it is a striking manifestation of the two points mentioned. This same owl may be described as a grotesque, but it is a grotesque of the order of Saxe's poem, when "The Barber Kept on Shaving." After the lavish use of ill-applied gorgeous coloring on pottery, with which we have been fairly surfeited, it is a matter of congratulation that the Martins adopted salt glazed stoneware as the medium to express their artistic thoughts, worked out in the comparative solitude of their little factory with nothing but nature around them. Some of these pieces we illustrate, including a portrait in pottery of Mr. E.

B. Martin by his brother, R. W. Martin. The latter is the eldest of the family and was a student at the Royal Academy, where, to quote "Modern Artists, "He did work which marked him out as one who would, even in England, where sculpture does not hold a favored place, in time achieve renown." Fortunately, we think, Mr. Martin preferred to express his fancies in an art which appeals to a wider circle and this earnest effort to give us pottery, true alike in shape, feeling and design, has done much to re-establish the beauties of stoneware. The Bohemian Club of San Francisco have a fine punch bowl in the shape of a monster owl, and the Yale crew a fine set of

cups of Martin ware. This tribute to their success is written with a strongly suppressed enthusiasm, an enthusiasm dangerous to give way to, for it could not but savor of exaggeration. A lady critic on first seeing specimens of these wares could find no other adjective to express her admiration than "stunning." And that expresses it exactly.

MARTRES, France. The only known specimen of this fabrique is a little bottle, very skillfully decorated with flowers and insects in polychrome in detached *motifs*, and bearing on the bottom the inscription:

MARIE THERESE, LE CONTE. Faite à Martres Le 18 7bre, 1775.

MARUM, PETRUS VAN, master potter established at Delft in 1759 at the Sign of the Roman. His products are of the most ordinary description, generally in blue. He signed P. V. M.

MARYLAND POTTERY CO., Baltimore, Md., formerly made decorated earthenware, but for the last few years have made sanitary ware exclusively. It is now controlled by the Edwin Bennett Pottery Company.

MASON'S IRONSTONE. This was patented in 1813 by C. J. Mason, of Fenton. We give it on the authority of Professor Church that powdered iron slag was an important constituent. In addition to tableware he made some very large pieces, including posts for iron bedsteads, large punch bowls, etc. The patent was purchased in 1851 by F. Morley. (See Ashworth.) He was succeeded at Fenton by W. Baker & Co. When the house in which he resided at Fenton was pulled down, a year or so ago a handsome chimney piece made of this ironstone and decorated with Chinese designs, was found. The London *Art Journal* says:

"The ware usually, but erroneously, known as 'Leek Pottery' (so called, but without any claim to the name, by Marryatt and Chaffers) is one of the highest developments of earthenware for decorative services, and is certainly at the same time one of the best, most beautiful and durable of bodies. Of extreme hardness and solidity, and of faultless color, it is capable of receiving the highest styles of decoration, and becoming, in fact, equal to the finest china in richness of coloring and in artistic manipulation. The manufacture of this peculiar ware owes its origin to Charles James Mason, a potter of great skill and of commendable taste, who, after a long series of experiments, took out, in 1813, a patent for the process, and carried on its manufacture for many years with success. The concern, however, for want of capital and from other causes, gradually dwindled down, until at length the molds and copper plates, etc., on which an immense amount of money had at one time or other been expended, got into various hands as securities for debts, and Mr. Mason thus became involved and crippled in his transactions.

"In 1851 Francis Morley purchased the patent, the molds, copper plates and entire business from Mr. Mason and entered with great spirit into the production of goods on Mason's principle.

"In the first French exhibition of 1856 Mr. Morley exhibited some samples of his ironstone china, selected hastily from such of his general goods as happened to be in the warehouse, and for them was awarded the first-class medal.

"About nine years ago Francis Morley retired from trade and sold

his entire business, molds, plates, etc., to Messrs. Ashworth & Bros., who continue to the fullest extent the manufacture of the 'Patent Ironstone China,' which they and their predecessor named the 'Real Ironstone China" on their marks, and produce all Mason's best patterns in services, etc., made from his original molds. These molds, Mr. Morley, on purchasing the concern, had carefully repaired, and therefore the goods are not copies, but are really made out of the very molds which Mason himself used." (See Leek.) M 142.

MASON, MILES, Longton. Established the latter part of the eighteenth century. M 143.

MASSIER, CLEMENT, Golf Juan, near Cannes. The productions of M. Massier are all characterized by originality and technical excellence. Large jardinières and pedestals with colored glazes in imitation of the secondary precious stones are simply marvels of brilliancy. He has successfully reproduced the *reflets metlliques* of the Persians, some of his greatest successes having been obtained in forms which adapted themselves more particularly to this kind of treatment, such as the lustrous scales of fish, the eyes of peacocks' feathers, etc. Another noticeable specialty consists of articles silvered and then covered with brilliant glazes—pale violet, amber and other unusual tones. The effect is similar to the Limoges enamels, and equals them in strength and purity.

MASSIER DELPHIN, nephew of the above. He prides himself on getting two surfaces of luster, but the general effect is too tinselly. He also obtains some glaze crystallizations.

MATHAUX, AUBE. A manufactory established here by Claude Lepetit de Lavaux, Baron of Mathaux, was in 1751 under the direction of J. B. Debray and Claude Dorez, both painters, the first from Nevers, and the second from Valenciennes. It passed in 1778 into the hands of Jean Barin, and ceased to exist in 1800. The products of this little manufactory may be classed in three styles—first, the style of Rouen; second, of Nevers; and third, of Lorraine. The two first were of but short duration. The usual mark was the letter M, but one piece is known bearing the name in full, MATHAVLX.

MAW & Co., Benthall Works, Salop. Tiles of a very artistic character, both for wall and flooring, are extensively made. For the former Mr. Walter Crane has made some very good designs.

MATSU-MOTO WARE. Made in the province of Nagato. The factory was founded by Mirva Kiusetsu, who had previously been engaged in an attempt to make Raku ware. He erected a kiln on the Corean system. On account of their resemblance to Hagi ware

his productions are distinguished as *Matsu-moto Hagi.* Mirva Kiusetsu died between 1704 and 1711 at the age of more than eighty years. The works are kept up by his descendant, Tozo, of the seventh generation.

MAYER POTTERY CO., LTD., Beaver Falls, Pa. This pottery was established in 1881 by Joseph and Ernest Mayer, the sons of the late Joseph Mayer, of the firm of T. J. & J. Mayer, the well-known potters of Dalehall, England. Joseph Mayer, the president of the Mayer Pottery Co., was one of the Mayer Bros., importers of earthenware, New York. His brother Ernest served his apprenticeship in potting with G. W. Turner & Sons, Tunstall, England, after which he was for some time manager of Clementson Bros.' Phœnix and Bell Works at Hanley. The Beaver Falls Pottery was originally owned by the "Economy Society," a quaint religious community of Germans who were at one time very wealthy. The present owners purchased the plant and modernized it. As the name of the town indicates, there is an immense water power derived from the Falls, and the pottery is probably the only one in the world run entirely by water power—at any rate, the only one in America. At first the only production was white granite, but, after considerable experiment and adaptation of English methods to American material a very superior grade of underglaze luster band and sprig ware was produced which gave the firm considerable prestige. The demand for this class of ware was superseded by a call for more modern and artistic decoration, and attention was at once paid to producing underglaze printed ware, this constituting the chief aim of production, though considerable success was obtained with some attractive colored glazes, especially in olive green, which was applied to jardinieres, teapots, etc. The manufactory was completely destroyed by fire in 1896, and on its site a more modern structure has been erected, where, with increased facilities, manufacturing has recommenced with a very earnest effort to improve the quality of the goods manufactured and maintain the time-honored traditions of their name. M 144.

MAYER. This is a familiar name connected with the Staffordshire Potteries, two of whom obtained considerable prominence—Jos Mayer, of Dalehall, and Elijah Mayer, of Hanley. The Mayers are probably descended from the Meir or Mayor family, of Derbyshire. John Meir was a "pott maker'" in 1721, and there were several Mayers, of Cock-pitt Hill, in 1772. In Staffordshire Hugh Mayer was a potter at Burslem in the early part of the eighteenth century. In the present century Thos. Mayer was in 1829 at the

Cliff Bank Works, formerly occupied by Daniel Bird, who was called the "flint potter," through his having ascertained the exact proportions of flint and clay required "to prevent cracking in the oven." The three brothers, Thomas, John and Jos (he was so christened), were probably related to Mayer, of Cliff Bank. They succeeded Joseph Stubbs, at the Dalehall Works (it used to be written Dale Hole), in 1836. Afterwards Mr. Liddle Elliot was taken into partnership, and the firm became Mayer Bros. & Elliot. Jewett gives their successors' names as Liddle, Elliott & Co., but it should be Liddle Elliot & Co., Liddle being Elliot's Christian name. The Mayers were clever potters, especially Jos, and he rivaled Wedgwood in an unapproachable white ware of a texture and color that could not be surpassed. Unfortunately, he died prematurely, through excessive study and application to his art. Among the improvements introduced by the Mayers was that of printing in from two to five colors on the biscuit ware. They also made a stoneware of a highly vitreous character, which was exceedingly popular, and in which many quaint conceits in the shape of pitchers, etc., were produced. It was also fashioned into vases with wreaths of flowers in relief. They marked their ware with an impressed stamp J. T. & J. MAYER, and later MAYER BROS. The sons of Jos Mayer came to this country, and now conduct a thriving business at Beaver Falls, Pa. Elijah Mayer had a pottery in High street, Hanley, opposite the Church Works. He married one of the Miss Mayers, of Dale Hall. His son Joseph purchased the Church Works in 1831, and rented them to his cousin, Wm. Ridgway; and two years afterward he also rented his own works to the same person. He filled his house, stables and barn with the most valuable part of his stock, and here it remained until his

BUFF TERRA-COTTA. E. MAYER.

death in 1860. In the early part of the eighteenth century Hugh Mare and John Mare were potters in Hanley, and produced black and mottled ware, Elijah Mayer being probably their direct descendant. He was a potter of considerable eminence, and produced an extensive variety of goods. His Egyptian black was almost, if not quite, equal to Wedgwood's, the ornamentation being sharp and well defined. Cane-colored and drab underglaze stoneware was another of his famous productions. We give an illustration of a vase in the Museum of Practical Geology. He made a service commemorative of Nelson's Trafalgar and Nile victories which was very popular. In addition to those mentioned there were Mayer & Mawdesley, of Tunstall, in 1829; Broughton & Mayer, of the Lion Works, Sandyford, Tunstall, in 1856, now occupied by Ford & Challinor, and Mayer & Newbold, of Fenton, who succeeded Thos. & Jos. Johnson, who made sale glaze ware. M 145.

MAZARINE BLUE, an intense, deep blue said to have been invented by the Chinese; but we have never seen on Chinese ware the same luminous depths acquired by English and French potters.

MAZZARELLA, E., Naples. We believe they were the originators of the popular lettuce leaf ware, which has been largely imitated. They are also responsible for the ware termed Neapolitan, ornamented with birds, large flowers, &c., in high relief, and which has not much artistic value. The pieces are usually overloaded with this applied decoration. The mark is usually impressed. M 146.

MCCORTNEY, J. R., first president of the Warwick China Company, Wheeling, W. Va., 1887-9.

MCINNES, JOHN, one of the founders of the New Crown Derby Porcelain Company, in 1877.

MCNICOL, H. A., president and treasurer of the Potters' Co-operative Company, of East Liverpool, O., more frequently alluded to as the Dresden Pottery Works, probably to distinguish them more particularly from

MCNICOL, D. E. POTTERY COMPANY, East Liverpool, O., manufacturers of C. C., Rockingham and yellow ware. M 147.

MACINTYRE, J., & Co., Burslem, manufacturers of door furniture, etc., of which Mr. W. Woodall, M.P., was senior partner. (See Woodall & Moorcroft.)

MEAKIN, ALFRED, Tunstall. These works were established in 1881, Mr. Meakin having bought the works formerly occupied by Turner & Tompkinson. Fine earthenware is made, much of it coming to this market. Mr. Meakin died in January, 1902. M 148.

MEAKIN, J. &. G., Eagle Works, Hanley, one of the largest

manufacturers of earthenware in the Staffordshire Potteries. The business was commenced at Longton in 1845, and moved to Hanley in 1848, by James Meakin. He retired in 1852 and was succeeded by his sons James and George, who in 1859 built the Eagle Works at Joiners Square. They have branch works at Cobridge and Burslem. In addition to their success as manufacturers the Meakins have endeared themselves to the people of the potteries by their public spirit and philanthropy. They started in business with the intention of making the best earthenware it was possible to produce—an intention which has happily been realized. M 149.

MEDICI. The great house of Medici had an enormous influence in the development of the potter's art. Pietro de Medici was one of the earliest patrons of Luca della Robbia. The Caffaggiola fabrique was largely patronized by them. Catherine de Medici was largely responsible for the introduction of the art into France, through her kinsman, Louis Gonzaga. She was also the patron and protector of the great Palissy. A later Grand Duke of the same family had in the Boboli gardens a manufactory from which was issued the famous Medici porcelain, the earliest made in Europe of which we have any examples.

MEDIEVAL POTTERY. The chief interest in English medieval pottery centers in the encaustic tiles made by religious orders and spoken of elsewhere. Jugs in the form of a knight wearing twelfth century costumes were in all probability made by the same orders, who, according to M. Solon, instead of exerting a beneficial effect and trying to raise the standard of ware produced, jealously guarded their secrets, so that outside of the monasteries nothing but the commonest wares were made. The same authority gives the following interesting list of the names of earthenware vessels in use at the time, most of which are derived from the French:

Cruske, Cruskyn, Cruche—A jug.
Crock—Also a jug, often mounted in silver or pewter.
Goddet or *Goddart*—A mug.
Gallipot—A small cup.
Botell, Flagon—A bottle.
Costeril or *Costeret*—A flask to be slung over the shoulder.
Jubbe—Spoken of by Chaucer.
Just—Holding the exact measure.
Squel, Ecuelle—A shallow basin.
Pitchers—Jugs are still called *pichets* in Normandy.

Many of these were undecorated, but the earliest, covered with green glaze, have sometimes embossed heads or rude foliage.

MEER, JANS VAN DER, potter of Delft. His wares were marked A. J.

MEILLONAIS, Ain, France. This little factory was established in an outbuilding of her chateau, in 1761, by Madame de Marron, Baroness of Meillonais, who herself decorated the faiences with very fine paintings which she presented to her friends and relations. When later the factory passed into different hands the ware little by little lost its artistic character. The decoration consisted of flowers, birds with long beaks, and often of garlands tied with ribbons of brilliant colors surrounding landscapes and sometimes figure subjects. An artist of some talent, named Pidoux, worked at Meillonais in 175, a jardiniere, beautifully painted with landscapes, bearing his signature.

MEHLEM, F. A., Bonn-a.-R. Established in 1755. This is a large and progressive factory employing about 700 hands and making a large variety of goods, both in china and earthenware. Imitative, rather than original, they have at least had the courage to mark their wares with their trademark. Some good pieces of Delft ware have been produced, and their vases decorated with landscapes in brown deserve special commendation. Their cheaper ornamental goods are very bright and showy, but have not much beyond this to recommend them. The fine pieces they occasionally send out make one regret that there is so much energy wasted at the expense of art for the sake of a mere volume of business. Mr. Geo. Leason of Stoke-upon-Trent joined Mr. Mehlem to produce a fine china body. M 150.

MEISSENER PORZ FABRIC. C. Teichert is the director, and there in a branch factory at Eichwald, near Teplitz. M 151.

MELCHOIR, JOHANN PETER, a sculptor, born in 1741 at Lindorf, Germany. Of poor parents, he had learned neither drawing nor modeling, but even as a child he sculptured some charming little figures. After many vicissitudes he entered the employment of a sculptor named Boos, at Aix-la-Chapelle. After visiting Paris he went to the porcelain manufactory at Hochst, and later to Frankenthal, where he was appointed sculptor to the Count. Later he worked at Nymphenberg. He executed several large pieces, but it is his small figures and groups that are most prized. These are now eagerly sought for. They are occasionally marked M.

MELLI, GIOVANNI, a parian manufacturer at Stoke-upon-Trent, who exhibited in London in 1862. He was succeeded by Robinson & Leadbeater. Melli, we believe, came to Chicago.

MELLOR, TAYLOR & Co., Cleveland Works, Burslem. Business was started here in 1880, the output consisting of white granite, printed and decorated goods. Two members of the firm, Henry

Pratt and Thos. Taylor, were educated in the potter's art by the Meakins, so that the class of goods manufactured closely resemble the well-known Meakin ware. The excellence of their productions has necessitated several very important additions to the original works, and they have now one of the largest and most modern factories in Burslem. M 152.

MENNECY-VILLEROY. A soft paste porcelain manufactory was started here in 1735 by Francis Barbin, under the direction of the Duke de Villeroy, on whose estate it was erected at a place called *Les Petites Maisons.* In 1747 it passed into the hands of Jacques and Julien (*q. v.*), and in 1773 was amalgamated with that of Bourg-la-Reine. Most of the porcelain made here is of a fine and transparent paste, coated with a glaze of perfect purity. The decorations, consisting of naturally painted flowers, landscapes in camaieu of various colors, were always executed with extreme care. Some, indeed, are quite works of art, and compare favorably with the productions of Vincennes and Sèvres. A large number of small statuettes and groups were also manufactured at Mennecy, painted in decided colors, or simply covered with white enamel. Mennecy also produced large quantities of articles for mounting in gold and silver, such as bon-bon and snuff boxes, heads for canes, knife handles, etc., all elegantly and delicately painted, and to which the pure and smooth glaze gave an additional charm. The mark was D. V., at first painted in blue and gold, but later impressed in the clay with a point. M 153.

MERAULT, a chemist from Sèvres, went to Korkec, in Poland, to take charge of a factory there. With other Sèvres artists they produced some richly gilded and well-painted porcelain.

MERCER POTTERY COMPANY, Trenton, N. J. This factory was founded in 1869, and was purchased by Mr. James Moses in 1875, since which time he has been president of the company. It has always occupied a prominent position in American ceramics, and an earnest effort has been characteristic of it to advance the art quality of the decorations. M 154.

MERCER, HY. C., Doylestown, Pa. Tiles made of the red clay of the district and covered with a heavy enamel, the decorations either copies or suggested by wares made by the Germans of Pennsylvania, have been produced here of recent years. Dr. Mercer has also reproduced the incised ware of the same origin in which the tulip predominates as a motif. He has also borrowed largely in design from the stove plates of the same origin, but the whole effort seems one of wasted energy.

MERLINO, or Merlingo, or Nerlingo, Guido, seems to have had a botega at Urbino in 1551, though his name does not occur as the actual painter.

MERRIMAC CERAMIC CO., Newburyport. Mr. T. S. Nickerson organized this pottery in 1897 for the manufacture of cheap flower pots and tiles. In 1900 they began the manufacture of terra-cotta and the shapes produced were so pure in design that they soon attracted attention. Garden vases, which before had been conspicuous for their unsightliness now took on a new lease of life endowed with the grace with which Mr. Nickerson formed them. The lines were gradually increased and beautiful colored glazes were made, some of the lamps with a dull glaze being extremely fine. Most of the ware is thrown.

MERY, CHOISY-LE-ROI, improved the process of printing in colors on all kinds of pottery. About 1810.

METAL MOUNTS. It is said in Persia the most ancient pottery was mounted in precious metals, and this was also done in France in the last century to enhance the beauties of antique Chinese pieces. German stoneware when first brought to England was similarly treated.

MESCH, JOHANNES. Master potter of Delft in 1667. He married in 1674 the daughter of Quiring Kleijnoven, and, like him,

produced those beautiful decorations in red and gold which are so rich and harmonious. His mark is given above (A).

MEUDON, Seine-et-Oise. A manufactory existed here, or, rather at Val-sous-Meudon, during the last century, producing faïence in the style of Rouen, and bearing trade signs and inscriptions identical with those usually attributed to Paris.

MEULAN, Seine-et-Oise, France. A factory in the suburbs during the last century (1791), produced ware in the style of Rouen, the rayonnaise form of ornament being particularly affected.

MEXBOROUGH, near Doncaster, England. A pottery was established here by John Reed. Queensware with beaded edges and decorated with enameled paintings, often of butterflies, was made here. Specimens are dated 1773, 1795, etc.

MEXICO. The early pottery of Mexico is distinguished by the knowledge of modeling displayed. Faces formed of clay are by no

means uncommon, and the features and expression revivify the original types. The Aztecs were familiar with the use of the potter's wheel, and produced forms which, if not equal to those of Greece, possessed considerable ingenuity and originality. The decorations were less successful than the shapes, being crude and archaic. In the sixteenth century Mexico was producing the famous scented pottery known as "Noble Buccaros," and which the potter of to-day is unable to reproduce. The pottery of to-day is not important, the best coming from Cuernavaca and Guadalajara. The former has alternating bands of two rich shades of terra-cotta, and is decorated with bits of broken china. It is made by hand, and some of the shapes

are extremely good, the workmanship, too, on the finer pieces being exquisite. The Guadalajara statuettes, representing water carriers, fruit sellers, chicken venders, etc., are extremely clever and interesting, and it is to be regretted that the *peon* does not give expression to his undoubted talent in larger and more extensive pieces. A native artist named Panduro has achieved quite a little fame with his small portrait busts.

MEYER. Commissioner of Sèvres from 1793 to 1800.

MEYER. An artist of Meissen who, with others, was forcibly removed to Berlin by order of Frederick the Great.

MIDDELDYK, HENDRICK VAN. Master potter of Delft in 1764 at the Sign of The Stag. Previously he had worked for Van den Bogaert. His mark was M. D. K. (c, page 385).

MILAN. The faïence of Milan, generally decorated on the glaze, is easily distinguished by the fineness of the body and the purity of the enamel. The decorations, often enhanced by gilding, are nearly always copies of Chinese and Japanese porcelain, the petals of the flowers being sometimes accentuated with white enamel. Some pieces have a Persian blue ground with a pattern in white, or broken by medallions in which are subjects in color. These usually bear the marks *d. e.* The most beautiful pieces were from the works of Rubati, and bear the inscription "F. de Pasquale Rubati, Mil°," or more rarely the letter f. (page 385). (See also Richard, Italy.)

MILDE, JACOBUS DE. Potter of Delft. Established in 1759 at the Sign of The Peacock. His ware was marked I D M. (G., page 385).

MILES. Said to have been a potter in Staffordshire about 1685. He probably made a rough sort of brown pottery smeared with lead.

MILES. A Staffordshire potter of the 18th century. A model of a wine cask supported by four children, the whole enameled and gilt, is ascribed to him.

MILLINGTON & ASTBURY. (See Maddock, Thomas, & Co.)

MINATO WARE. This factory is situated near the town of Sakai, Province of Idsumi. Its origin is of great antiquity, and it is even said that Giyogi, who is credited with having invented the potter's wheel, worked here. A brittle kind of biscuit ware was made in the sixteenth century. Afterward a thin glaze was added similar to that on Cochin-China ware. Both wares are now made. A pottery was also founded about 1573 by Hachita Gensai, but has been discontinued.

MINO WARE. Made at several small villages in the Province of Mino. Up to 1810 the product had been confined to a kind of earth-

enware, but the manufacture of porcelain was then commenced. There are some 110 kilns there, where china, decorated in blue, is produced, somewhat more translucent than that of Owari.

MINORCA. One of the Balearic Islands, where Hispano-Moresque pottery was produced.

MINTONS. Ten years before the death of Wedgwood there was working for the Spode factory an engraver named Thomas Minton, who was destined to create a business colossal in its proportions and whose influence on English ceramics cannot be overestimated. The founder of this famous business, the Thomas Minton above mentioned, came from an old Salopian family, and was born at Wyle Cop, Shrewsbury, in 1766. He was educated at the Shrewsbury Grammar School, and having completed his education was apprenticed as an engraver to Thomas Turner, of the Caughley China Works. Here he engraved the famous Willow pattern, the design having been adapted from a Chinese pattern. After serving his apprenticeship he went to London, where he did some important engraving for Josiah Spode. January 1, 1789, he married Miss Sarah Webb, and by her had a family of four sons and six daughters. Soon after his marriage he removed to Stoke and established himself as a master engraver in a house near the Trent Bridge. Some years afterward he decided to embark in the manufacture of earthenware, and purchased the site of the present manufactory. The exact date cannot be determined, but it was probably between 1793 and 1796. The first buildings were on a very moderate scale. Very soon afterward Mr. Minton was joined by Joseph Poulson, a near neighbor and very clever practical potter. The Poulsons were an old family who had lived in Stoke for two or three centuries, and in Wedgwood's early days theirs was the only house of any importance in Stoke. Minton & Poulson was the style of the firm, and the combination of forces proved very successful. They received considerable financial help from a Mr. William Pownall, of Liverpool, who some time later entered the firm as a sleeping partner, and the firm became Minton, Poulson & Pownall. The products consisted almost entirely of printed earthenware, and from the very commencement the works were a success. Some time prior to 1817, though the dates cannot be accurately determined, Messrs. Poulson and Pownall had ceased to be associated with the firm, leaving Thomas Minton the sole proprietor. Of Thomas Minton's sons, two were admitted into partnership with their father, the eldest, Thomas Webb, and Herbert, the latter born February 4, 1793. This was in the year 1817. The eldest son retired in 1821 to enter the church. Herbert had developed

considerable application, and at the early age of sixteen was able to take the position of salesman and representative of his father, both in London and the provinces. From 1828 to 1831, for some unexplained reason, Herbert Minton ceased to be a partner in the firm, though he continued to devote ceaseless energy to developing the business, which had considerably increased. May 29, 1836, Thomas Minton died, and Herbert became sole proprietor. Soon after his father's death Mr. Herbert Minton admitted into partnership Mr. John Boyle, and the style of the firm was changed from Thomas Minton & Sons to Minton & Boyle. This partnership continued for five years and was then dissolved, Mr. Boyle becoming a partner in the historic house of Wedgwood. In 1845 Mr. Michael Daintry Hollins, the nephew of Mrs. Minton, was admitted as a partner, followed in 1846 by the admission of Mr. Colin Minton Campbell, Mr. Herbert Minton's nephew and heir, and the style of the firm became Herbert Minton & Co. Mr. Herbert Minton, being in failing health, gradually released himself from business cares, leaving the conduct of the business to his two partners, and went to reside at Torquay, where he died April 1, 1858. The business was continued by the remaining partners until 1867, when they dissolved partnership, Mr. Hollins taking the tile business, which had been conducted as a separate concern under the title of Minton, Hollins & Co., and Mr. Campbell the remainder of the business. The style of the firm was changed to Minton & Co., and Mr. Campbell shortly afterward admitted his cousins, Herbert and Thomas Minton, as partners. After Mr. Campbell's death in 1883 the business was transformed into a limited liability company under the style of Mintons, Limited. Of this Mr. Thomas Minton is chairman, and Messrs. George Leason and H. Minton Robinson were managing directors. Mr. Leon Arnoux until his retirement in 1892 was also joint director with the above. At the beginning of the eighteenth century the Minton Works gave employment to just about fifty hands. At Herbert Minton's death upward of fifteen hundred were in active employment. It is computed that in 1840 the value of English ceramic exports amounted only to about £573,000, while in 1858 they were about two and a half million pounds sterling, and undoubtedly to this large increase Mr. Minton's activity largely contributed. In 1849, with the assistance of Mr. Arnoux, Mr. Minton resumed the attempt to make hard porcelain, and succeeded so well that in 1851 vessels for the laboratory were exhibited and pronounced by experts as superior to those of Meissen and Berlin, which had formerly been imported in large quantities, the imports being about

£60,000 annually. But the crowning glory of his life and works was the revival of the manufacture of encaustic tiles. Mr. S. Wright some years previously (about 1830) had taken out a patent for their manufacture as an original invention, but only such specimens were obtained as encouraged the hope that success might ultimately be obtained. From him Mr. Minton purchased the patent and set to work with a fixed determination to succeed. He had to solve the problem of firing the various colored clays so as to insure perfect uniformity of color throughout the body, to so temper them as to correct the irregularities of shrinkage induced by the different materials used to produce the desired colors, and to extend the range of colors used by the potters of the Middle Ages. After months of patient research, of failure and disappointment, success eventually crowned his efforts, and Minton tiles are known and used the world over. Many difficulties were encountered, difficulties of too technical a character to enumerate here, but Mr. Minton's dogged determination, aided by the valuable service of Mr. M. D. Hollins, triumphed over all, and in 1846 the encaustic tile business was firmly established. Toward the close of the term for which the patent had been taken out Mr. Minton allowed the Worcester Porcelain Company to manufacture encaustic tiles under a license, but the Worcester clays were unsuitable, and they abandoned the manufacture and were succeeded by Maw & Co., who shortly after removed to Broseley. Some specimens of majolica ware which had formed part of the collection of the Duke of Buckingham coming into the hands of Mr. Minton in 1851, he determined to reproduce them, and with

LAMP VASE BY CARRIERE-BELLEUSE.

what success is well known. For fifteen years he was the only manufacturer of majolica in England. An attempt had been made in 1798 to manufacture china, but it was not a success, and was abandoned in 1811, but was resumed in 1821, the earlier patterns being imitations and adaptations from old Derby china. A few years later, when the Derby factory began to decline, many of the workmen joined the Minton Works, and the decorations rapidly improved. Bancroft, Steel and Hancock were among the principal fruit and flower painters; John Simpson was the principal figure painter from 1837 to 1847, and Samuel Bourne was designer-in-chief. Simpson in 1847 was appointed to an official position at Marlborough House. Bourne, who served his apprenticeship to Wood & Caldwell, was working at Stoke until 1860. In the year 1845 the Spode factory had been experimenting with a view to producing a ceramic material resembling marble, and Mr. Minton turned his attention in the same direction. The Spode factory termed their production "Porcelain Statuary," the Minton production was called "Parian," and the latter name has been generally adopted for this beautiful body. Mr. Emile Jeannest, a sculptor of great ability, was engaged, and he produced some charming creations, but left the Minton factory to accept the position of art director with the well-known silver house of Elkington & Co., Birmingham. He was followed by M. Carriere, now known as Carriere-Belleuse, a sculptor of remarkable genius, whose beautiful creations commanded universal admiration, and one of which we illustrate. On leaving Mintons, M. Carriere-Belleuse returned to Paris, where fresh laurels crowned his works, and his abilities were recognized by the French Government, which placed him on the Commission of the Imperial Manufactory at Sèvres. To him succeeded M. Protat, who executed some of the stone statues at the India office. He was working for the firm as late as 1858. Of course, other modelers were employed, but to these three belong the chief honors and the popularity the new body attained. About 1840 Mr. Prosser patented a process for solidifying china clay in dry powder by subjecting it to great pressure in iron molds, obtaining a substance of extraordinary density and evenness of texture. This Minton purchased, and used for the manufacture of buttons, of which exceedingly large quantities were produced. Later it was applied to the manufacture of tesseræ for the formation of pavements in imitation of those of the ancients. In 1849 Minton was fortunate enough to secure the services of Mr. Leon Arnoux, the son of a potter of Apt, France. Mr. Arnoux occupied a position parallel only to that of

M. Brongniart, at Sèvres. Under his skilful direction the quality of the body and the beauty of the glaze were both improved; and colors before but imperfectly realized were produced in great purity.

VASE BY MUSSILL.

Fortunately for the fame of the concern, Mr. Minton left behind him worthy successors in C. M. Campbell and M. D. Hollins, who worthily not only maintained but increased the prestige of the works. From 1868 to 1883 Messrs. Minton were fortunate enough to have the services of a craftsman of more than exceptional ability — Charles Toft. To him was entrusted all the intricate problems that arose, whether it was sgraffito work, damascened vases, or those wonderful replicas of faïence d'Oiron for which the firm was so celebrated After the Franco-Prussian War the artistic element was largely increased, some of those who became associated with Messrs. Minton being A. Boullemier, a painter of cupids and figures very original

in conception and executed with the utmost tenderness and grace; M. Mussill, probably the best underglaze bird and flower painter in the world, and of whose work we give an illustration; and Mr. Solon, the distinguished artist in *pâte-sur-pâte*, of whose work we shall have the pleasure to speak later on. His son, Leon Solon, promises to make as successful a career as his father. Among the latest Minton productions is their Argenta ware, which has very rich glazes and odd fire effects. The finishing decoration is in silver. *L'Art Nouveau* finds intelligent expression here, Mr. Leon Solon being particularly happy in designs of this character, characterized as they are by a delightful spirit of originality and gracefulness of execution.

MINTON, THOMAS. Chairman of the Minton Company. He is the grandson of the founder of the house. He has been associated with the firm for nearly forty years, and was admitted into partnership by his cousin, C. Minton Campbell, in 1868. The London market has always been the most important outlet for Minton goods, and since the firm was changed into a limited company Thomas Minton has had control of this.

MINTON, HOLLINS & Co., Stoke-upon-Trent. Manufacturers of encaustic tiles known as "Minton" tiles. (See Minton and M. D. Hollins.)

MITCHELL, JOHN. A potter of Burslem, 1736. He employed Aaron Wood, the best block cutter of the time, so as to keep pace with his rivals in the trade, great attention being at that time paid to beauty of forms and shapes.

MITCHELL, HENRY. Animal and landscape painter. He served his apprenticeship to Mr. Venables, of Burslem, and also studied landscape painting under Mr. Speight, when that noted artist was in the employ of John Ridgway, of Cauldon Place. He died early in 1898, aged seventy-three.

MODENA, Italy. Although the antique pottery of Italy is referred to by Pliny and by Livy, we have no exact record or marked examples of wares produced there during the period of the Renaissance. Modena artists in terra-cotta worked at Ferrara, and Christoforo da Modena was *boccalaro* to the duke of that territory in the sixteenth century.

MOHR & SMITH were potters in Staffordshire toward the close of the eighteenth century. We give this on the authority of Professor Church, though we have never heard of them, nor are they mentioned by Jewett.

MOHGRABBIN SETTLEMENTS IN NORTH AFRICA. Pottery has

been made here since the time of the Saracens, and still retains some of its old beauty of color. The decorations are rude.

MOLLER & DIPPE, Unterkoditz. Established 1833.

MOMBAERTS, THE. Potters of Brussels. It was in 1705 that Camille Mombaerts, the head of the family, established at Brussels a factory which after his death passed into the hands of his son, and which was for a long time renowned for its enameled faïence. Previous to the death of Camille the factory for some time suspended operations, but his son, Corneille, went to Rouen, Nevers, Saint Cloud and Delft, where he was employed as a workman, and learned many of the carefully guarded secrets of manufacture, so that when in 1724 he succeeded to the business he was able to bring a large amount of knowledge and practical experience to bear on it. He carried it on successfully for a number of years, the *Journal du Commerce* of March, 1761, speaking of the products of the S. A. Royale fabrique at Brussels as superior to those of Delft and Rouen, and consisting of a large variety of shapes, the tureens, vegetable dishes, etc., often taking the shapes of the actual vegetables they were intended to hold, such as melons, cabbages, artichokes; or of poultry, such as turkeys, chickens, pigeons, etc. These were carefully modeled, and are superior to those made at Bordeaux and Saint Omer about the same period. Another manufactory which rapidly rose to importance was founded in 1752 by Jacques Artoisenet, son-in-law of Mombaerts, but in 1766 the two establishments were united.

MONCLOA, near Madrid. A china manufactory was established here in 1827.

MONMOUTH POTTERY COMPANY, Monmouth, Ill. All kinds of stoneware are produced here, and the plant is one of the largest in the country.

MONTAUBAN, France. Armand Lapierre, who had worked for several years at Ardus, in 1770 founded a manufactory at Montauban, which appears to have quickly risen to prominence. He, however, died in 1772, aged forty years. His widow and children continued the business, without much success, until 1780, when his eldest daughter married Jean Quinquiry, and he, by his industry and intelligence, restored much of the prosperity of the business, though he could not withstand the general ruin of the French faïence manufacturers caused by the introduction of English earthenware. Many pieces were decorated in the style of Moustiers, with a flower in blue. There were also figure subjects and landscapes, but indifferently executed. The green usually is pasty, and forms a crust, but

the purple is very brilliant and the other colors very fresh. The faïences seldom bear any mark, though it is probably correct to ascribe to Montauban, of the period of Lapierre and Quinquiry, the monogram L. P. Q. and others marked with an M. A less important factory was founded at Montauban in 1783 by Jean Pierre Garrigue, under the name of "*Faïencerie de Pomponne.*"

MONTEFELTO, FEDERIGO DA, Duke of Urbino. Much credit is due him for the development of Italian art. His duchess, Battista Sforza, immortalized by Tasso, was his aid and ally in all his good work. He died at a very advanced age in 1482, leaving Urbino the artistic center of Italy.

MONTPELLIER, France, possessed in the seventeenth century a manufactory of faïence, but nothing is known of its products. Another one was established in 1750 by Andre Philip, of Marseilles, producing especially services decorated on the glaze with bouquets in colors, in which violet and manganese predominate on a yellow background. They do not bear any mark.

MONTEREAU. William Clark, from Newcastle, and Ralph Shaw, a Burslem potter—the latter after experimenting at Lille—obtained in 1775 a subsidy from the government, and started a manufactory of earthenware. At the outset the productions were of fair quality, the manufacture being superintended by an Englishman named Hall; but they soon lapsed, in common with other French manufactories of English earthenware, and became so that the productions were practically useless. The efforts of M. de St. Amans, aided by M. Brongniart, resulted in a great improvement being effected not only in the body and glaze, but in the character of the decorations. In 1810 the works came into the possession of De St. Criq, who transferred it in 1829 to Lebauf and Thiebaut.

MONTE LUPO, Italy. Many signed pieces dated 1639, etc., are known. The ware is coarse and the painting poor. Another class of ware with higher claims was made with a rich brown glaze, ornamented with reliefs in white or yellow clay.

MONTIGNY, France. A faïence factory was established here in 1739.

MOORCROFT, WILLIAM. Florian is the arbitrary name given by the manufacturers, Messrs. MacIntyre & Co., Burslem, to the pottery credited to Mr. W. Moorcroft. In its manufacture there has been a return to first principles, as it is all made by the old process on the potter's wheel, the turner's lathe, and slip tracing, the more mechanical method of molding having been rejected, on purpose that as far as is practicable in a commercial project the individuality of the designer should be preserved; nor is there any use made of other mechanical

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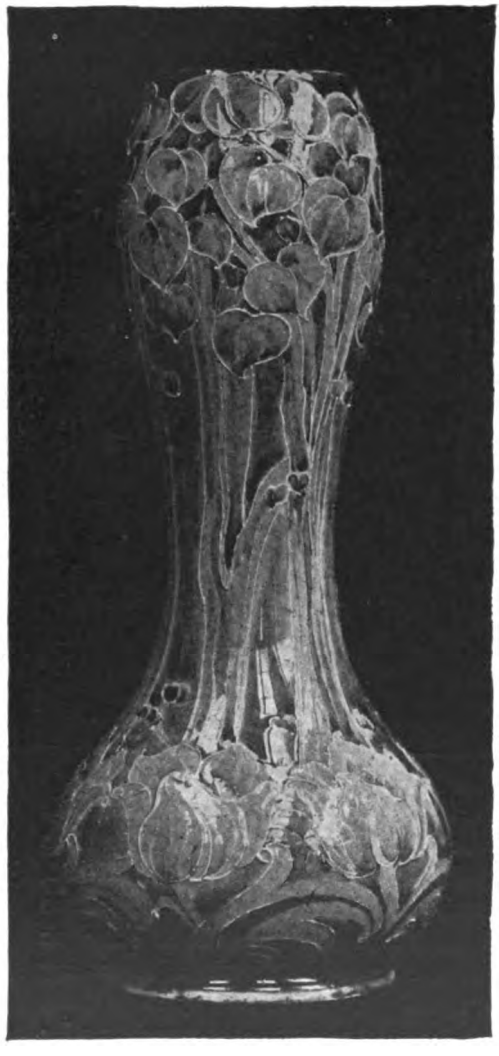
aids, such as printing the outline, each piece being entirely done by hand. The body is a fine earthenware and on this the artist sketches the design in the raw clay with slips mixed with various metallic oxides, capable of standing the heat of the biscuit kiln. Whilst this means a very limited palette, the ware seems to have gained rather than have lost from its limitations, the grays and blues, with their outlines of white, being most satisfying, especially when the coldness is relieved by a few touches of orange. Students from the Burslem School of Art, of advanced experience, are trained to carry out Mr. Moorcroft's designs under his immediate superin-

tendence, and no piece is allowed to be fired that has not passed his critical judgment. There may be sometimes a slight departure from the lines laid down, but such departures, if artistically conceived, are welcomed instead of rejected, and it thus happens that no two pieces are exactly alike. While the methods employed have no elements of novelty, they have been so used as to produce something entirely new and of such a high order of merit as to justify us in classing the work as a distinct advance in ceramics, charming alike in thought and execution. Florian is the inspiration of an artist and the fulfilment of the dream of a potter upon whom the beauties of the pottery of the Far East, of Greece and Egypt, had left an indelible impression, and who has succeeded in giving expression with much humanity to some beautiful thoughts in an imperishable material. Our illustrations will give a good general idea of the forms and dec-

oration, but the beautiful colors with their iridescence and charm, their hidden depths revealed by the fire of the furnace, can only be imagined. We believe this Florian ware was originally introduced at MacIntyre's by Mr. Henry Barnard, who later went to Wedgwood, Mr. Moorcroft continuing the work at MacIntyre's.



FLORIAN WARE.

MOORE & Co. were potters at Southwick, near Sunderland, in 1803.

MOORE BROS., Longton, Staffordshire. Manufacturers of fine

china, chiefly ornamental. The body and glaze are both excellent, and the designs are characterized by fine and graceful modeling and careful finish. Cupids and flowers predominate, the latter sometimes decorated with colored golds. Some good pieces in *pâte-sur-pâte* are produced here. M 155.

Mr. Bernard Moore, the senior member of the firm, in an entirely unobtrusive way, has for years devoted himself to the solving of the problem of the red glazes of the Chinese, and it is largely due to his investigations that it is possible now to obtain in Europe the effects formerly obtained by the Chinese alone. To quote Mr. Wm. Burton:

"A striking point in connection with these glazes is the extremely small percentage of copper needed to give the richest tint. It has been shown, both by analysis of Chinese glazes and by actual European practice, that not more than one-half per cent. of copper oxide is needed to give the richest and most solid red; indeed, it seems impossible to keep the amount of copper in the glaze too low. Another practicable point of the greatest interest is the variation produced in these glazes by slight variation of composition or of firing temperature and conditions. The solid, uniform, opaque red glaze which would seem *à priori* the easiest to produce, is, in some respects, really the most difficult. From an examination of many European pieces it is evident that one of the first things that happen in the melting of the glaze is the aggregation of the copper compound. At a certain stage of the firing it appears to gather itself into clots, and while it may become once more diffused throughout the mass, it also may not. The tin or iron compounds which may also be added to the glaze aid this clouding, and there can be no doubt that the bluish and violet streaks, mixed with white, that variegate the finest pieces of red glaze, are caused by their means. While some of these effects may be due to aggregation of copper oxide, others must have a different origin. Mr. Bernard Moore holds most strongly that if the reduction be pushed too far the red glaze becomes quite white and colorless.

"One other point and I must leave this fascinating subject. The opinion was held for a long time that rouge flambé glazes could only be produced on hard paste porcelain like the Chinese. This is quite a mistake. Such glazes have been successfully produced on English bone china, stoneware, and English earthenwares, and though, of course, the result varies somewhat according to the nature of the body, the really important part is the production of a glaze which will melt and come perfectly bright and glossy in a reducing atmosphere."

Morgenroth & Co., Gotha. Established 1863. M 156.

Morimura Bros., Nagoya, Japan. Imitations of French and German china.

Morocco. At the Glasgow Exhibition last year there was an interesting display of pottery, vases, jars, teaware, etc., from the potteries at Fez. They were in the ancient Arab style, intricate in decorating and highly colored.

Mortlake, Surrey. There were two potteries here during the last part of the eighteenth century. In one, founded by Wm. Sanders about 1752, Delt and earthenware were made. This factory was in possession of the same family in 1792, but in 1811 was carried on by Wagstaff & Co. Punch bowls, etc., and tiles were made. The other pottery was in existence up to 1811, and was worked by a family named Kishere, Mr. Joseph Kishere being the last proprietor. Stoneware of fair quality was made.

Mortlock, John. This name frequently appears on ware from the Rockingham Works (*q. v.*). It is that of a dealer in London, whose son still conducts the business.

Moustiers, France. A town in the the department of the lower Alps, situated in a mountainous and almost inaccessible district, had been forgotten as a pottery-producing town until the discovery of a dish some few years ago painted in blue, with a scene representing a bear hunt, after an engraving by Tempesta, a celebrated Florentine engraver of the seventeenth century. It was inscribed "*G. Very, f a Moustiers, chez Clerissy.*" Our illustration is a scene copied from the same artist, and was probably made in Clerissy's workshop. The first manufacture at Moustiers was that of Pierre Clerissy, son of Antoine Clerissy, was in full operation in 1686, and was made over to his nephew, also named Pierre Clerissy, in 1728. He was ennobled by Louis XV. in 1743, and then took into partnership Joseph Foulque, a clever decorative artist, and who later purchased the works, where no less than twenty-two painters were employed, and which remained the most important in Moustiers and the neighborhood. The paintings above mentioned, together with the borders, were executed in camaieu blue. Later, these borders became much lighter, and these in turn gave place to graceful interlacings, enclosing mythological figures, nymphs, satyrs, birds, monkeys, etc., very tastefully and ingeniously disposed. This style was very popular, and lasted more than half a century. When the Count d'Aranda started his manufactory at Alcora, in Spain, he took with him some Moustiers workmen. Among these was Olery, who, upon his return to Moustiers, started a factory there. He introduced polychrome decorations, the center of most of the pieces being but

indifferently painted with mythological subjects, but surrounded with wreaths of flowers and small medallions softly and harmoniously painted, and of the most charming effect. The polychrome decorations, unlike those in camaieu, were seldom copied from engrav-

ings. The Moustiers faïence was celebrated for the purity of its milky-white enamel, and for the delicacy of its finish and ornamentations. The success of Moustiers was sufficient to found a school, and its products were imitated at Varages, Taverne, and even Marseilles, and by several Savoy manufactories, notably that of La Foret. M 157.

Moreau, Marie. A family quarrel having taken place, Marie Moreau, widow of A. Chicanneau, established herself in Paris, 1773 in conjunction with Dominique Chicanneau. The mark was C. M.

Morin. Dr. Martin Lister, who accompanied the Duke of Portland as envoy to France, writing in 1698, says that the proprietor of the St. Cloud Works was a chemist named Morin. (See St. Cloud.)

Morley & Co. (See Wellsville Pioneer Pottery Company.)

Morley, F. (See Mason's Ironstone.)

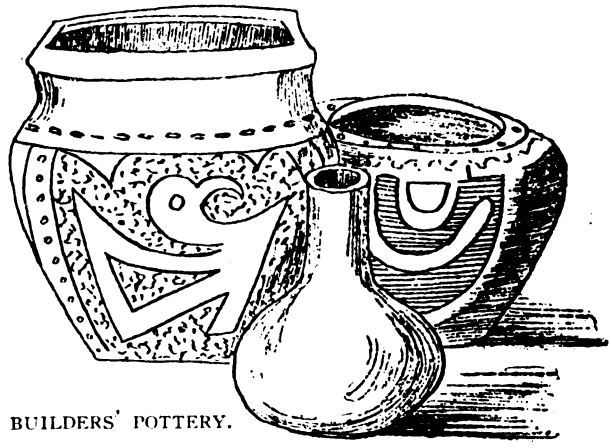
Morris & Willmore, Trenton, N. J. The Columbia Art Pot-

tery, as Messrs. Morris & Willmore's works are called, were built in 1892-3. Mr. W. T. Morris was educated at the Worcester Porcelain Works, and went afterwards to Belleek, and from thence to the Ott & Brewer Works at Trenton, where he was employed as a decorator. M 158.

Morrison & Carr, New York. A factory at West Thirteenth street, New York, started by Mr. James Carr after he left South Amboy, N. J., was carried on under the above firm name from 1856 to May, 1871, when Mr. Carr bought out Mr. Morrison's interest.

Moses, John, & Sons Co., Trenton, N. J. The Glasgow Pottery was established in 1863 by John Moses, and was one of the first ten potteries in Trenton. It had originally two kilns, and gradually but surely grew to its present large proportions. Mr. Moses has catered to the wants of the million rather than to the select few. He has long been a prominent figure in Trenton, and has been closely identified with the history of pottery there. Last year a considerable advance was made in the matter of shapes and decorations, some very meritorious designs being put forth which quickly became popular. In 1896 Mr. Moses admitted his son, Howard B., into partnership. Mr. Speeler has charge of the decorating department. Mr. John Moses died Jan. 30, 1902. He was born in Ireland in 1832. M 159.

Molds. Plaster molds were not introduced in the manufacture of pottery much before 1750. Previously they were made in porous terra-cotta, lead, brass, or copper. These metal molds gave much sharper and clearer results than the plaster molds now in use. When the North American Indian or other aboriginal used a net or a basket of twigs, and lined it with clay, that was in effect a mold.



MOUND BUILDERS' POTTERY.

MOUND BUILDERS. The mound builders, whose most populous settlements were in the southern part of the Mississippi valley, reaching from there to the valley of the Ohio, have left many evidences of their knowledge and use of pottery. Little or nothing is known of them as a people, the most tangible theory being that they were identical with the Toltecs. Their pottery compares well with that of South America, and some pieces are both well designed and finished. Others, while quaintly designed, are rudely finished.

MUELLER, J. N., Schönwald. Established 1879. M 160.

MUELLER, KARL, a modeler employed at the Greenpoint, N. Y., porcelain works. He is a German whose education was mostly acquired in France. He modeled the Century Vase exhibited at Chicago, and later the Karamos vase, an illusration of our laureate's song.

MUNICH, ROYAL PORCELAIN MANUFACTORY OF. Exhibited in 1851, porcelain drinking cups designed by Neureuther, the then director.

MURRHINE VASES. These, the most celebrated ornaments of ancient Rome, the priceless treasures of Pompey and Nero, have for ages excited the curiosity of the learned savants of the ceramic art, but to-day are as enigmatic as ever. Modern writers have hazarded many a guess as to their identity; ancient authors, from their widely varying descriptions, only to increase our confusion and uncertainty. Not a single, solitary fragment exists which can be recognized as undoubtedly having formed a portion of these priceless vases—so priceless, indeed, that Augustus Cæsar, after the capture of Alexandria, retained as his share but one Murrhine cup from the royal collection. Pliny thus describes them: "The surface does not shine brightly; it has a fine polish, but no brilliancy. Its value lies in the quality of the colors, which run into each other in veins of red, purple and white, so as to produce by their blending graduated tints going from fiery purple to milky rose." He goes on to describe their iridescent edges, their dull spots and the perfume inherent to the material, stating that the Murrhine substance is extracted from the earth, and that when cut the slabs are never larger than small-tablets, blocks of it being seldom so large as an ordinary drinking glass. In another place he contradicts this by alluding to a Murrhine cup holding more than three quarts. He states that they came from the East—"from several parts of the Parthian Kingdom, chiefly from Caramania." His descripion generally indicates a natural substance. Against this assumption is the testimony of Propertius, who speaks of the "Murrhine cup baked in Parthian furnaces." Juvenal and other Latin writers also allude to them. The controversy as to what they were,

whether of artificial or natural material, began early in the sixteenth century with the revival of the study of Roman antiques. A very brief synopsis of the different arguments, extending over centuries, is all we can give. In the sixteenth century Johanis Palmerius tried to prove that the word was derived from myrrha, and had been given to such vases because they were formed of potter's clay mixed with that perfume. At Nuremburg, in 1550, Jerom Cardou started the hypothesis that they were Chinese porcelain, and though no known Chinese porcelain agrees with Pliny's description, he found many warm supporters, and many ingenious arguments were advanced. Other theories advanced were that Murrhines were respectively shells or vessels adorned with mother-of-pearl; a kind of onichite or alabaster of difficult determination; by the Abbe Le Blond, in 1782, that they could not have been anything but sardonyx, though, as the ancient writers all speak of Murrhine cups and vases of considerable sizes, the gem theory is hardly sustainable. The Oriental idea was taken up again in 1791 by H. von Veltheim, who substituted for Chinese porcelain Chinese steatite or soapstone vases, some of which may be seen at Dresden and other places, and which agree with much of Pliny's description. This theory was further developed by De Remusat, in Paris, in 1820. An English antiquary in 1810 thought they were made of Derbyshire fluor spar. In 1815 F. Thiersch, at Munich, after reviewing and disposing of all previous theories, thought that the true Murrhine substance was certain vitreous paste and opaque glass similar to the Portland vase, though no mention is made in ancient texts of blue, which invariable forms the ground of vases of that order. And so the controversy has waged, and to-day we are no nearer the truth than when the controversy started. Modern writers have hazarded their guesses, but none have been as bold as a contemporary who gravely asserts that an effort is being made in this country to reproduce the famous Murrhines. Readers of "Quo Vadis" will remember that Petronius before his death broke his Murrhine cup, "which resembled a rainbow in brilliancy," that no man's lips should touch it or other hand pour from it in honor of another divinity.

Music Plates. There are frequently found in the faïences of Rouen, Nevers, Moustiers and Delft humorous couplets taken from the popular airs of the day, but it was, we believe, only on the Rouen ware that the words are accompanied by the music. These latter are very rare, only fourteen of them being known. Some of the faïences of Lille and Delft, however, show open music books with the airs printed; but they are very far from equaling those of Rouen.

N

NAKAJIMA. A modern potter of Satsuma, Japan.

NANCY. A faïence manufactory was founded here in the year 1774 by Nicholas Lelong, though little is known of its products except that Clodian, the celebrated sculptor (born at Nancy, 1745, died, 1814), worked here and executed for that pottery most of his charming and graceful statuettes, "which to amateurs are now worth their weight in gold." Of late years a distinct artistic movement has made itself felt in Nancy, at the head of which undoubtedly stands M. Emile Galle, who is, perhaps, as much talked of to-day as a ceramist as Deck of Paris was a few years ago. He was born in 1846. His original conceptions in pottery, glass and art cabinet work have long been highly appreciated.

NANTES. The pottery industry existed here from the sixteenth century. Chas. Guermeur and Jacques Rolland had a factory here in 1654, to which are attributed white faïences with fleur-de-lis in relief. Another pottery was established in 1752 by Leroy Montillee, who was succeeded by Delabre, and later Perret and Fourmy, under whose direction it was authorized to take the title of Royal Manufactory.

NANTGARW, or Nantgarrow, South Wales. A small china manufactory was established here about 1813 by Wm. Billingsley and his brother-in-law, Geo. Walker. Nantgarw is a secluded valley about nine miles from Cardiff. Mr. Dillwyn, of the Swansea China Works, writing in 1813, says: "At this time two persons under the assumed names of Walker and Beely set up a small kiln at Nantgarrow, and sent specimens of a beautiful porcelain having a granulated fracture much like fine lump sugar, with a claim for government patronage; and through my friend, Sir Joseph Banks, as a member of the Board of Trade, I was requested to visit Nantgarrow, and to report my opinion of its quality. From the great number of broken and imperfect articles which I found it was quite plain that they could not be produced with any certainty, but I was made by the parties to believe that the deficit arose entirely from the inconvenience of their little factory, and was induced to build a little china works adjoining the Swansea pottery that the granulated body might have a fair trial. While engaged in some experiments for strengthening this body so that the articles might retain their shape in the kilns, and for removing their liability to craze and shiver, I was

astonished by receiving a notice from Flight & Barr, of Worcester, that the persons who called themselves Walker and Beeley had clandestinely left their service, and warning me not to employ them. Flight & Barr, in the most gentlemanly way, at the same time convinced me that this granulated body could never be of any use; and as it was not worth their while to prosecute them, the runaways went back for a few months to Nantgarrow, and I do not know what afterward became of them. Beely, under the name of Billingsley, though he had another alias, was well known in all the British china manufactories to be a first rate painter of flowers; and Walker, whose other name I forget, had married his daughter, and was employed with his father-in-law in Flight & Barr's mixing room." This reads somewhat in the nature of a defence, and its animus is apparent. Though Marryatt gives the date of this letter as 1813, it reads as if written later. He further says that Billingsley returned to Nantgarw in 1811, and that the works were sold to Rose in 1828. The first date cannot be right; the second one should be 1820. Billingsley worked at Coalport after the Nantgarw works were closed, and died in 1828. As a matter of fact, the china made at Nantgarw was undoubtedly the most beautiful ever made in England, and Mr. Dillwyn probably did not require much inducing to transfer the manufacture to Swansea, where it appears to have been made from 1814 to 1817 only. Mr. Jewett, speaking of the transfer of the Swansea and Nantgarw works to Coalport, alludes to them as at different dates; so it is probable that Billingsley and Walker did return to Nantgarw. All authorities are agreed as to the excellent quality of the productions of Nantgarw and to its close identity with that of Swansea. We give an illustration of a saucer in the South Kensington Museum. The mark was NANT GARW. C. W. These initials have been spoken as those of

Geo. Walker, but the letter is plainly a C. and they may have been intended for China Works. Another manufactory of china was carried on at Nantgarw by W. W. Young (see Swansea), but its productions have not been recognized.

NANKIN. Blue and white china porcelain, so-called from the port of export. It was made at King-te-tchin.

NANKIN TOWER. The famous so-called porcelain tower of Nankin has been repeatedly destroyed and rebuilt. It was originally erected B. C. 833, and consisted of three stories. After being demolished it was rebuilt by Kien-wen-ti A. D. 371-373. It was again destroyed and rebuilt by an Emperor of the Myng dynasty. It was completed in 1431, having been nineteen years in the course of erection. This was to immortalize the memory of his mother for her virtues and the many benefits she had conferred upon him, and hence came to be known as Poa-en-assi, the "Convent of Gratitude." The designs for the tower were furnished by the architect Hoang-li-tai. It was overlaid with highly-glazed enamel tiles or slabs of various colors; its height was nearly 330 feet, and it cost in the neighborhood of $3,750,000. Upon a tablet in front of the tower was inscribed: "Ti-i-thi (First Tower of the Empire), to attest for ten thousand years the gratitude of its founder." During the Taeping rebellion it was again destroyed, and has not been rebuilt.

NAST. A manufacture of hard porcelain was founded in 1780 by Le Maire in the Rue de Popincourt, Paris. It was bought in 1783 by Nast, who marked with his name in stencil. He was succeeded by his two sons, and the manufactory was transferred to the Rue des Amandiers.

NATCHEZ INDIANS. The Natchez 300 years ago were making pottery comparable with that of Europe, and were acquainted with the use of colors.

NATINZ, Persia. Pottery has been made here for some hundred years, and some of the finest ware was produced, but is now inferior.

NAUDOT, CAMILLE, FILS & Co., France. They claim to be the only firm in the world making true *pâte tendre*. The china is extremely thin and is pierced in intricate patterns, these piercings being filled with perfectly transparent enamels, giving the effect of a miniature stained glass window. The combinations of tints such as ruby, amber and lapis lazuli are skilfully designed and are extremely effective.

NAUTILUS PORCELAIN COMPANY, Glasgow, although only established a few years, produces some exceedingly creditable ornamental porcelain in the way of finely modeled figures, center pieces, etc. A

Nautilus shell in eggshell china is a fine example of casting, the china being actually no thicker than eggshell. M 161.

NEW FOREST WARE, Hampshire. This was the site of extensive pottery production by the Anglo-Romans, probably in existence until early in the fifth century. Vases and bowls in gray, red, buff and brown with a dull purplish glaze, occasionally decorated with large indentations on the surface, were made.

GRANITE AND CREAM WARE VASE.
NEALE & CO.

NEALE & Co., Hanley. Established about 1776, and made imitations of Wedgwood ware, copying his styles and designs very closely. They succeeded J. Palmer (*q. v.*), who was probably the "Co." in this concern. Their productions were cleverly made, especially in black basaltes, of which they executed a fine medallion of W. Penn among others, and sprinkled marbling touched with gold on a cream body, of which we gave an illustration. In 1787 the firm was Neale & Wilson, who were succeeded by C. Wilson. An early mark was I. NEALE in two circles.

NEUHAUS. Furstenburg workmen tried to establish a china manufactory here, but on discovery were sent out of Brunswick.

NEVERS, France. The faïence for which Nevers afterward became celebrated owes its origin to Italian workmen. With the exception of the faïence d'Oiron and Palissy ware, France had not during the sixteenth century produced anything in pottery worthy of mention. Louis de Gonzaque, through the influence of Catherine de Medici, his kinswoman, summoned to France a number of Italian artists, one of them a potter named Scipio Gambin, probably a native of Faenza. He was related to one of the same name to whom Henry III. granted authority to establish a manufactory at Lyons in 1574. He is probably responsible for the early productions of Nevers, though there are no historical documents to prove the assumption. The shape and ornamentation are similar to the majolica of the declining potteries of Urbano and Faenza, invariably decorated with mythological or allegorical subjects, and incidents taken from the Bible and Roman history. The painting was poor, the superadded glaze of the Italians was wanting, and from the few specimens existing the manufacture could not have been an important one. In 1608, either Scipio Gambin was succeeded by or a new manufactory had been started by two Italians named Conrade, who came from Savona. A new style of decoration was introduced by them, mythological subjects, etc., giving place to variegated ornament, for the greater part in imitation of the Oriental china which was being introduced into Europe. Frequently Italian and Oriental ornaments were mingled together. Dominique Conrade, the head of the family, became a naturalized French subject, and finally settled at Nevers; his son Antoine, after serving fourteen years in the army, was appointed potter to the King, his grandson Dominique serving in the same capacity to the Queen at a later date. For thirty years the Conrades seem to have had full possession of the field, but in 1632 rival factories were started, one of them by Pierre Custode, who in his sons had worthy successors to compete with the Conrades. To them are ascribed the best productions of Nevers—magnificent faïence objects with a Persian blue ground and decorated with white enamel sometimes heightened with opaque yellow. Possibly other firms were also engaged in its production, as the quality of the blue glaze varies considerably. It is worthy of note that the purity of this enamel caused its origin to be for a long time mistaken, Brongniart assigning it to Persia. Concurrently with this manufacture Oriental porcelain was largely imitated, the designs being used without regard to their appropriateness, but always executed in blue

camaieu of wonderful tone. Both these styles had to make way early in the eighteenth century to coarsely painted plates, etc., decorated with coarse and even licentious scenes, the most popular of which was *l'arbre d'amour* (the tree of love), whilst the drawings of saints became grotesque. In this category must be included the altogether ridiculous political cartoons known as *Faïences Patriotiques,* manufactured during the French Revolution, and in which an immense trade was done through the boatmen of the Loire. The Nevers pottery is of importance only on account of its extent. With the exception of the Persian blue pieces it is of little interest and had small influence on the ceramic art. Pillivuyt has now a china manufactory here, and there is also another one producing reproductions of old Nevers faïence. The faïence of Nevers is rarely marked. In addition to the name of Conrade, the following marks and monograms occur: "J. Boulard, Neuers, 1622"; "H. B. 1689," and "E. Borne, 1689," on statuettes of saints of a quite good style being the marks of Henri and Etienne Borne; the monogram J. B. being that of Joseph Bourdu; the mark of Denis Le Febvre; "F. R., 1734," attributed to Francois Rodrigues; and the mark of Philip Haly, 1772, on plates and baskets with fruits modeled in high relief. M 161 A.

NEVERS WARE. SEVENTEENTH CENTURY.

NEW AMSTEL, Holland. A factory was in operation here in 1808, but ceased in 1810.

NEWCASTLE-ON-TYNE. There were several manufactories here the close of the last century, generally making a cheap grade of earthenware, but some statuettes are well modeled and potted, though often spoiled with vulgar coloring. There are several potteries in existence there now, notably that of C. T. Maling & Sons.

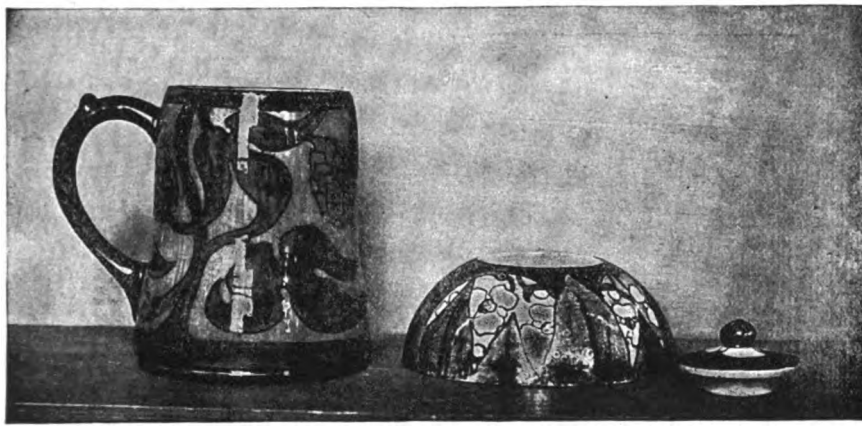
NEWCOMB POTTERY, New Orleans. Founded 1895. This is under the direct management of the Art Department of the Newcomb College, and was started with a view to extend æsthetic culture and to create a demand for artistic work such as would justify the study of art as a means of earning a livelihood. The result has been most satisfactory, and a large number of young women have been educated for this work, for whom an artistic vocation would have been otherwise impossible. The flora of the South has very largely furnished the motif for the decoration, the prevailing and characteristic tone of which is a bluish green. Newcomb pottery has a distinction all its own, and there is no trace in it of any previous type, either foreign or otherwise. That the little pottery in so short a space of time should have achieved this distinction is most remarkable, and is a proof, if proof were wanted, that both from an artistic and a commercitl sense, the primary idea should be to evolve a type, rather than to imitate or reproduce. Whilst the artists at the pottery are under the superintendence of Professor Ellsworth Woodward, assisted by Miss Mary J. Sheerer, they are allowed full free-

dom in their work, and it thus happens that every piece shows the individuality of its creator, no matter whether it be incised, painted in slip on the clay or in mineral colors on the biscuit. Some of the colored glazes are triumphs of technical skill. One of the chief charms of Newcomb ware is its absolute restfulness. It never tires the eye, and a few pieces scattered about a room give an air of repose altogether delightful. Professor Woodward and his clever pupils are to be warmly congratulated. M 163.

SNOWDROP JUG.

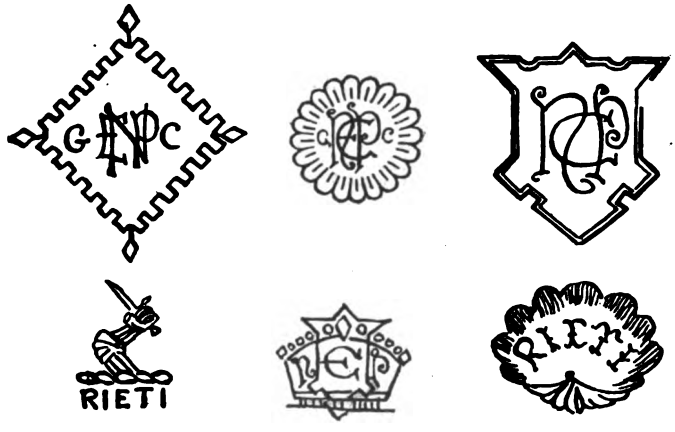
NEW ENGLAND POTTERY COMPANY, Boston, Mass. Founded in 1854 by F. Meagher as a yellow and Rockingham factory, and afterward worked by W. F. Homer, who continued it until 1875, when it was taken by L. W. Clark and Thomas Gray. Early in 1886 they were fortunate enough to secure the services of Thomas H. Copeland, a modeler and decorator, and commenced making a semi-porcelain body. Thomas Copeland in a short time produced some excellently modeled shapes, decorated in a most tasty and artistic manner, one of his best effects being produced in a rich blue freely ornamented with gold. Decorations of an original character, but partaking of the style of Royal Worcester, were also brought out and met with a marked success. It must be borne in mind

that at this time American decorations were of a very primitive character, and these new designs and colorings from their intrinsic worth no less than from their novelty created something of a sensation. This ware they christened "Rieti," the product consisting principally of



NEWCOMB MUG AND INKSTAND.

chocolate jugs, jardinières, creams and sugars, and such like utilitarian articles. Specimens of this ware will have in a short time an added value, as showing the advance made in a single step in American pottery. Thomas Copeland, it should be remembered, not



only modeled the shapes and designed the decorations, but also sold the goods; so the credit may fairly be ascribed to him individually. Mr. Copeland left the New England Pottery Company early in 1895.

when the manufacture of Rieti ware was abandoned. Of the marks, No. 1 was used on earthenware from 1883 to 1886; No. 2 on C. C. ware; No. 3 on white granite since 1886; No. 4 from 1886 to 1888; No. 5 from 1888 to 1889; No. 6 since 1889.

NEW HALL WORKS, Shelton, Staffordshire. R. Champion, of Bristol, sold out his patent for making china to a syndicate of Staffordshire manufacturers consisting of Samuel Hollins, Jacob Warburton, William Clowes and Charles Bagnall, trading as Hollins. Warburton & Co., of which John Daniel subsequently became managing director. It has been generally understood that Champion for some time acted as manager of the new works, but although he removed from Bristol to Staffordshire, his biographer, Mr. Hugh Owen, proves that he took no part in the new factory. He was not followed to Staffordshire by his skilled workmen, and the principal interest attaching to the New Hall china is the fact that it was the first hard porcelain made in Staffordshire. The decorations were generally crude and clumsy. In 1820 the body was changed, bones being introduced, and the manufactory was finally closed in 1825. The marks were a large incised N and "New Hall" in italics inside a double circle.

NEW WHARF POTTERY COMPANY, Burslem, Staffordshire. Manufacturers of earthenware. M 164.

NEW YORK AND RUDOLSTADT POTTERY COMPANY. (See Rudolstadt.)

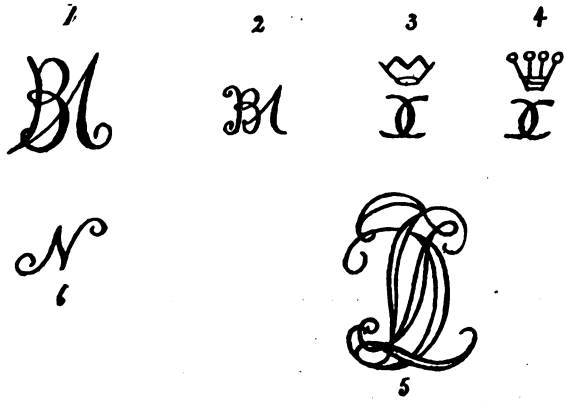
NICOLA DA URBINO. An artist of the school of Xanto, who contributed largely to the fame of the Urbino factories.

NICOLOSAS, FRANCESCO, of Pisa, is said to have carried the art of the Robbias to Spain. He made some bas-reliefs for a church in Seville.

NIEDERMEYER, JOSEPH. Chief modeler at the Vienna Works in 1747, when it was purchased from Du Pasquier by Maria Theresa.

NIEDERWILLER, Saarburg, France. This establishment was founded by Jean Louis de Beyerle in 1742, with the aid of workmen from Paul Hannong's factory. It soon acquired considerable importance, as the faïences were not only well made, but well decorated. Madame de Beyerle superintended the artistic development, and supplied many of the designs for the shapes and ornaments, painting with her own hands pieces as presents for friends or for her own use. In addition to faïence, Beverle commenced the manufacture of china, the clay being procured from Saxony. He died in 1784, and was succeeded by General Count de Custine, who appointed François Lanfrey, a skilled ceramist, as director. Under his care the china

manufacture equaled that of Sèvres. Cyffle is said to have worked here, though in statuettes and groups the manufactory may be content to rest its laurels on those of Charles Sauvage, generally called Lemire, a very talented sculptor, and who contributed much to its success. M. Garnier attributes to him a fine statuette of Louis XV. in Roman dress. A style of decoration which seems to have had a great success was to paint a small landscape in camaieu pink and fill up the remainder of the plate with imitation of woodwork. Count Custine fought side by side with Lafayette in the War of the Revolution. On his return to France he presented to Washington a handsome service made at his factory and decorated with Washington's coat-of-arms. He also issued a beautifully modeled group of Benjamin Franklin and Louis XVI. During the French Revolution of 1789 the Count was suspected of disloyalty to the Revolutionists, probably on account of his aristocratic birth, was found guilty, and guillotined the following day. He was the last of the lords of Niederwiller. Lanfrey succeeded to the works, and carried them on until his death in 1828. Dryander, of Saarbuck, bought the works, but discontinued the making of china after a few years. The following are the Neiderwiller marks: Nos. 1 and 2, Beyerle; B for Beyerle, N for Neiderwiller; Nos. 3 and 4, under Count de Custine; No. 5, Lanfrey's mark; sometimes N occurs alone (No. 6).



NIGG, JOSEPH. A flower painter at the Royal Vienna China Manufactory.

NIKOSTHENES. A Greek potter whose name has been found on more than fifty specimens.

NIMES, France. A faïence manufactory existed here in the sixteenth century, the products of which have usually been ascribed to Italian origin; but a pilgrim bottle in the collection of Baron Gustave de Rothschild bears the inscription "Nismes, 1581," and serves to identify many specimens of the same character.

NINSEI, NONOMURA. A celebrated Japanese potter, who established himself at Kioto about 1650, and afterward originated the manufacture of faïence at Awata. His productions are highly esteemed by the Japanese, and but few examples have come to Europe. He made principally tea bowls, boxes, and other small articles. Clever imitations of his ware were made in the first half of the eighteenth century by Shisni Zenzan at the Narutaki kiln, which are also much prized. Modern imitations are made on tea bowls, with a nick cut out of the rim at the foot. They are of a red-brown pottery, partially glazed and decorated with numerous figures, groups of philosophers, boys playing with a snowball, etc. They bear the old mark, and are made especially for export.

NISHIKITE WARE. A Japanese ware so called from its decoration resembling that of brocades.

NOEL, M. An artist at the Haviland factory during the period they produced faïence.

NORTHAMPTONSHIRE. The banks of the Neu and Caistor were sites of early English potters. (See Anglo-Roman.)

NORWAY. The pottery of Norway is not important. At the late Stockholm Exhibition H. Berles, of Christiana, exhibited earthenware vases with Greek designs, and A. Schneider, from the same locality, showed a tasteful series of slip-decorated earthenware plates and others with glazed surfaces showing mottled colors. (See also Gustafsburg.)

NORTH AMERICAN INDIANS. For our present purpose we have classed together as North American Indian the pottery of all the United States and territories, though the evident difference in race might have suggested a different treatment for the Pueblos of New Mexico, Arizona, etc. If it is true, and there is weight in the arguments advanced, that they are descendants from the Mound Builders or Toltecs, their pottery would be entitled to separate consideration. The pottery of other races has furnished valuable help to the student; that of North America only increases his doubt as to whether the Indians are an indigenous race or of Asiatic descent. We find the pottery of the Mound Builders, or pottery analogous thereto, as far east as New Jersey and Vermont—a section they certainly did not penetrate. When the country was discovered the

most civilized portion extended from New Mexico to Peru, the Pueblos having towns surrounded by walls scaled by ladders. Specimens of Pueblo pottery are abundant, some painted in zones and wavy lines, and varied occasionally with the forms of animals and insects. They are usually covered with a thin glaze and afterward painted. Large pieces were made by drawing the clay into strips, which, beginning at the bottom, were wound spirally around, each layer being pressed down upon the one below it. This is what is known as coil, or corrugated, pottery, and was seldom glazed and never painted. Modern pottery is still made by the Zuni Indians, not only for their own use but for sale. Of this we give an illustra-

MODERN JUNI.

MOLDED AND COILED JAR.

tion. Among the shore or fishing people the pottery is often distinguished by the use of nets, which served as molds, while the tribes occupying the forest or prairies used for the same purpose barkwork mats, baskets and gourds. The aboriginal potter was acquainted with the necessity of mixing a tempering material with the clay, using sand and ground shells for this purpose, the Delaware and Iroquois tribes making pots of clay "mixed with powdered shells and burned so hard that they were black throughout." Here was a distinct advance on the practice of the Indians of the Gulf of Mexico, who, evidently ignorant of a tempering matter, molded their pottery on gourds, and to support it until baked covered them with baskets made of rushes or creepers. The Indians of Georgia were acquainted with the use of kilns for firing, though the usual method was to build a large heap of wood about the dried vessels. Sometimes a jar was molded at the bottom in a basket, and then finished by coiling, as shown in the illustration. The Mandau and Hidatsu tribes of the Upper Missouri River used, according to Catlin, "a tough black clay to make their dishes and bowls, which were baked in kilns made for the purpose. (Such vessels became very hard, and were used to hang over the fire and boil their meat

in them.)" This was written in 1830, and they continued their manufacture until a very recent period. In Illinois pottery has been found entirely covered with one color—black, dark brown or brilliant red, probably applied to the clay before firing. With the coming of the whites and the introduction of metal utensils, the molding of clay vessels by the nomadic tribes generally fell into disuse. At best it had been a matter of necessity—the necessity removed, the Indian was freed from a probably irksome task.

NORWICH, Conn. Bean Hill Pottery. As early as 1796 earthenware and stoneware were made here by Charles Lathrop; also a common red earthenware with a black glaze.

NOTTINGHAM, England. The earliest known dated example of Nottingham brownstone ware, for which the town was celebrated, is a posset pot dated 1700, made for S. Watkinson, the mayor of the town. The pieces differ from those of Fulham in that they affect particular shapes—loving cups, small straight mugs, puzzle jugs, and the bear jugs described and illustrated under that heading. The salt glaze is much smoother, and the decoration, instead of subjects in reliefs, consists mainly of scrolls, foliage and flowers. Their designs were sometimes scratched in the wet clay, sometimes cut subsequently to the firing through the glaze, as in the beautiful specimen we illustrate. The color of the glaze is warm and bright, and the pottery almost uniformly excellent. Bourne & Son, Lovatt & Lovatt, and Parker & Hassell have potteries there at the present day.

BROWN STONEWARE. NOTTINGHAM.

NOVE, near Bassano, Italy. A manufactory of china was established here in 1762 by Pasqual Antonibon, who had previously made majolica. Vases, finely modeled and richly painted and decorated, were produced. The mark is a star.

NOVE, ANTIBONE DI, Bassano, shows really artistic feeling in ceramic work, with a disposition to cling to older traditions of shape and color instead of aiming at novelty.

NUREMBERG. The Hirschvogels stand to Germany in much the same relation as Della Robbia does to Italy, and, like him, they were able for a considerable time to preserve the secrets of their manufacture. Viet Hirschvogel was born in 1441, and died in 1525. To his son Augustin is generally accorded the credit of those beautiful vases with figures in relief, sometimes on the shoulder, but oftener in a niche formed in the body of the vase, and which are now so eagerly sought. The Hirschvogels made Nuremberg a pottery center, and there gradually grew up an important industry in the shape of porcelain stoves covered with beautiful green and brown glazes and enriched with gold. These were elaborately modeled and enriched with pillars, capitals, caryatides, plaques, etc., and on the surface were reproduced subjects in relief of mythological and biblical subjects, or of decorative motifs. These glazed stoves were succeeded by others, painted principally with biblical subjects, the embossments gradually giving place to the new style of decoration. Nuremberg also produced the ordinary faiences the most remarkable having figure subjects in blue, and a little later designs copied from Oriental porcelain. Among the Nuremberg potters whose names have been preserved are Stroebel, 1730, who made ware in the style of Beyreuth; Kordenbusch, who also worked at Bayreuth; Christopher Marx, 1724; Passinger, 1727.

NYON, on the Lake of Geneva. A small factory was established here by a French flower painter named Manbrie, from Sevres, and ware in the Sevres style was produced, the body being of good quality. The mark is two fishes, but the works seems to have had only an ephemeral existence.

NYMPHENBURG, Bavaria. In 1747 a hard porcelain manufactory was established here by Count Heinshausen under the orders of the Elector, Maximillian Joseph. A potter named Neidermeyer and a fireman named Lippich made experiments which do not appear to have been very successful, as, in 1756, Heinshausen sent for Ringler, and under his skilful management it was successfully carried on. It it not quite clear whether the original factory was established at Neudech or Nymphenburg, but after 1758 the manufacture was carried on exclusively at the latter place, under the patronage of the new Elector, Chas. Theodore. In 1780 the manufacture seems to have been partially suspended, but took a new lease of life in 1799, when

its force was augmented by many of the Frankenthal workmen. Its products are highly prized and of great beauty. Heintzmann, landscape, and Adler, figure painter, both produced some charming works. Another good artist was Lindemann. F. C. Foquet, an artist who had previously worked at both Sevres and Berlin, was also employed. The works are now in private hands. M 165.

O

OEST, F. S. W., & Co., Berlin. Established in 1824. They make majolica and faïence.

OHI WARE. This is the product of a kiln at Ohimachi, in the province of Kaga. It was founded on the Raku system in 1680 by Chozayemon. The product has not quite the same appearance as the Raku, being somewhat redder and denser, the glaze of a yellowish red, with a luster similar to platina luster. The inhabitants of the village are now nearly all engaged in pottery making, making ordinary ware for domestic use.

OHIO CHINA COMPANY, East Palestine, O. Earthenware. Founded in 1898. M 166.

OHIO VALLEY CHINA COMPANY, Wheeling, W. Va. This factory was originally started under the name of the West Virginia China Company for the manufacture of hotel china, Mr. James Clark being the leading spirit. The venture was unsuccessful. The Ohio Valley China Company made a variety of ornamental goods, and the body was probably the best ever made in America. Some very good pieces with mazarine blue ground and raised gold enrichments were produced, and it is none too early for collectors to secure specimens as the ware marked a distinct stage in American ceramics. Dr. Zimmer was a capable chemist, but the impossibility of securing capable help was a serious drawback and the works were finally closed. They are now operated as a sanitary ware factory under the style of The Riverside Pottery Company, of which Mr. C. W. Franzheim is president and Mr. J. W. Mays the manager. M 167.

OHR, GEORGE, Biloxi, Miss. Mr. Ohr, with an unbounded confidence in his own genius, is laying up at Biloxi a vast store of ware in the hopes that it may be purchased entire by the nation as an example of his prowess. He has undoubtedly skill as a thrower, but is apt to distort his products in order to get curious shapes. Did we but accept him at his own estimate he is not only the foremost potter in America, but the whole world. He says so and he ought to know.

OINOCHOE, a Greek vessel resembling a jug, with a lip and a handle rising above the orifice. It was used in serving the guests from the krater, or wine cooler.

OKAWAJI-MURA. This village "lies three miles in a northerly direction from Arita, whither the works were removed about A. D. 1710 by Prince Nabeshima, from Iwayagawa, near Arita, the latter place being in a public highway and not suitable for the secrecy required. The works at Okawaji-mura were under the local government of the prince, and the produce consisted solely of the best kind of ware, such as plates, tea cups and ornamental pieces used as offerings to the Imperial Court and the Shogun, or to supply the demand of various princes. Its private sale was positively prohibited. The lower edge of the saucers for the cups is painted in blue color, with a design resembling the teeth of a comb, distinguishing it as official work; hence it obtained the name Kushite, meaning the ware with comb teeth. It is very much appreciated by the public. Two varieties of celadon were also produced, one being an imitation of the Chinese and the other a peculiar, fine crackled ware. At present, through the want of good workmen, no fine pieces can be obtained. The Koransha of Arita is, however, making great efforts to restore the ancient tradition."—*A. W. Franks.* This was written in 1880.

OLD BRIDGE, now Herbertsville, N. J. A stoneware factory, owned by Van Wickle, was in existence here about 1800.

OLD HALL EARTHENWARE COMPANY, LTD., Hanley. This factory was started by Job Meigh in 1790. He was a good practical potter, and under his management an extensive business in printed earthenware was done. In extending the work in 1745 the cottage where Wm. Brownfield was born was incorporated. Job Meigh was succeeded by his son Charles, who traded as Chas. Meigh & Son, and sometime after 1851 incorporated the business under its present style. A line of ornamental goods is also made, rather severe in character. The company is now being wound up. M 169.

OLD JAPAN. Imari, province of Hizen, produced as early as 1641 china decorated with colors and gilding for exportation to China, and which was afterwards exported by the Dutch to all parts of Europe. The decorations consisted of richly painted birds and flowers in blue, red and gold, with the occasional introduction of black. That it was made specially for export is proved by the fact that vases usually came in pairs or sets, which would be useless in a Japanese house, there being no place on which they could be stood.

OLD STYLE GREEK. That period of Greek ceramic art where the figures are painted in black, except that the exposed parts of females

are pure white and the eyes red. White is also more plentifully employed in the hair of old men, horses, etc.

OLERY, a manufacturer of faïence at Moustiers, France, 1745. He had previously worked for the Count d'Aranda at Alcora, and was one of the first to introduce colors at Moustiers. He was a skilful painter, both of figures and ornaments.

OLPE, a Greek water vessel similar in shape to the modern ewer.

OLIVER, succeeded Baron d'Anthes at the Aprey factory, 1789.

OLLIVER, SIEUR. (See Paris.)

O'NEAL, E. P. A painter at the Worcester Porcelain Works about 1780.

ONONDAGA POTTERY COMPANY, Syracuse, N. Y. Organized in 1871, the first production being white granite. In 1886 the manufacture of porcelain was commenced, and this, very much improved, is now the staple production of the firm. In 1891 some ornamental pieces in bone china were made, which were distinguished as "Imperial Geddo." This was a very fine body, the decorations chaste and delicate, but, owing to the growing popularity of their table china, its manufacture had to be abandoned, but not, we hope, permanently. There does not seem any reason why, under given conditions, the manufacture of artistic ornamental china made by a firm with the established reputation of the Onondaga should not be a success. American pottery is no longer what it was. The child has gone through its youthful maladies and given promise of sturdy manhood, and slowly but surely the public are recognizing this growth. The Onondaga has not obtained its present high position without lots of hard work, of alternate defeats and victories, and that it has triumphed is due largely to the unremitting labor and skill of its president, the potter of the company, Mr. James Pass. M 170.

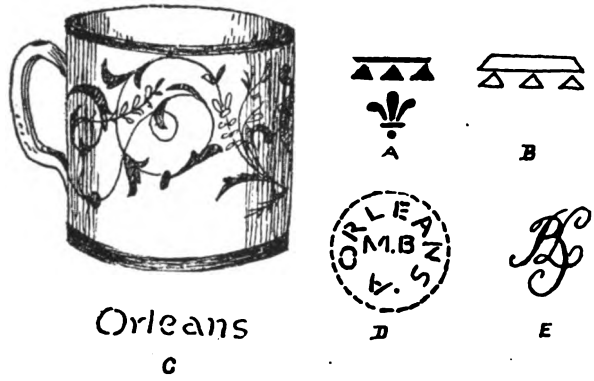
OPPAL, BENGRATH, director of the Meissen factory from 1814 to 1833. (See Dresden.)

ORIBE. Ware made at a factory in the province of Owari, founded in the beginning of the seventeenth century by order of Furuta Oribe-no-sho Shigekatsu. The thickness of the glaze was uneven, and often fused with an enamel of a verdigris color. Some pieces are painted with a plum color and latticed bars in dark brown, forming the coat-of-arms of the Furuta family. The manufacture is still carried on, but has degenerated.

ORIENTAL. The secretiveness of most Orientals, combined with the antiquity of the art, has made this a dangerous subject to enlarge upon. Much of our information is gained from more or less reliable traditions, some from actual knowledge, and more from sur-

mise. The Chinese reproduced with minute exactness the triumphs of previous centuries, as did the Japanese, sending these to Europe, while not allowing the originals to leave the country. The Persians, by some authorities, are mere imitators of the Chinese, and Persian china is classed as Chinese. Modern Satsuma (*q. v.*) is mistaken for old. The well-known Hawthorn pattern is claimed for both China and Japan, as is also the "Chrysanthemo pæonienne" ware. Chinese dates were used on Japanese porcelains long after their era had passed away. Old Corean is mistaken for old Japan, and so the list might be multiplied indefinitely. (See China, Japan, India, Persia, etc.)

ORLEANS. Toward the close of the last century there was a faïence manufactory here producing painted pieces in the style of Strasburg, and also imitations of Wedgwood, jasper and mottled



wares. A china manufactory was founded by Sieur Gerault (see Daraubert) with the title of Royal in 1753, and was placed under the protection of the Duc de Penthieve. According to Marryatt both hard and soft porcelain were made. The mark was a lambel, with three points, and sometimes accompanied by a fleur-de-lys (A and B). After the Revolution stencils were used (C and D). From 1808 to 1811, during the direction of Benoist Le Brun, the mark was his monogram in blue under the glaze or in gold (E). The cup illustrated is of hard paste.

ORTHOCLASE. (See Feldspar.)

OSAKA, RAKU WARE. This is manufactured by a native of Osaka named Kikko, who is still living. His work is finer and more delicate than other Raku, but it is not so tasteful. His common ware is very good.

OSTRAKON, the Greek name for a potsherd, from which we derive our word ostracize. The Greeks not only gave receipts on potsherds, but used them for recording votes to ostracize a citizen, and also for deciding the side to be taken by the various players in the game called *ostrakinoro*. These pieces had red and black sides, and according to how they fell after being tossed up, the player was assigned his position in the game.

OTA, near Yokohama. From the kiln here much of the so-called Satsuma ware is produced. It was founded by a merchant named Suzuki Yasubei, who employed a potter named Kozan, of Kioto, and who worked with so much success that the original Satsuma greatly depreciated in value. He had some notable specimens at the Philadelphia exhibition.

OTO WARE. Made in the province of Tosa, Japan. The factory was founded about 1658-1673 by Shohaku, who had studied under Ninsei, though some authorities give the date as about 1592, and claim Ninsei as a pupil of Shohaku. Ware for domestic use in the neighborhood is only produced now.

OTT & BREWER, Trenton, N. J. The Etruria pottery was founded in 1863, by William Bloor, Joseph Ott and Thomas Booth, the latter being the only one of the three now alive. In 1864, Mr. Booth retired from the firm and was succeeded by Garrett Schenck Burroughs, who in 1864 gave place to John Hart Brewer. Soon after Mr. Bloor withdrew and the firm became Ott & Brewer. White granite had been the only production up to 1875, when Isaac Broome, a noted sculptor and modeler, was engaged, and he prepared a number of busts and figures in Parian for the Philadelphia exhibition of 1876. The attempt was so successful that the firm decided to make a further effort to give an artistic character to their goods and the manufacture of Belleek china was commenced. In this Mr. Brewer was fortunate enough to secure the services of William Bromley, who had been identified with its manufacture both at Belleek and Stoke. Artistically the result was very satisfactory and Belleek equal in delicacy and luster to any made elsewhere was produced, but the firm were unable to weather the financial depression of 1892 and 1893 and the business came to an end.

OTTAVIANO. An assistant of Luca della Robbia.

OUAN-LOU-HOANG. The Chinese name for pieces of pottery where green, yellow and blue are mingled upon a white ground, producing a marble effect.

OWARI. The province of Owari, next to Hizen, has the most important potteries in Japan, producing all varieties of porcelain.

earthenware and stoneware. Seto, the principal seat of the industry, has given in Japan the generic name for pottery, viz.: *Setomono.* In the South *Karatzumono* called after the Karatzu factory is also used and has the same meaning, *mono* signifying articles or things. The blue and white porcelain of Japan often approach so nearly to one standard that it is difficult to distinguish them, but in the case of the Owari ware it is usually marked Seto, though it is unusual for Japanese marks to give the name of the province or locality in which the ware is made. According to tradition pottery was made in Owari in the year 920, but it is not until early in the thirteenth century that we know that potteries were esablished at Seto by Kato Shirozaimon, otherwise known as Toshiro (*q.v.*), in 1225, on his return from China. The ware made from that date to the middle of the eighteenth century was earthenware and stoneware of a rude quality, and it was not until 1800 that a descendant of Toshiro, named Tamikichi, went to Arita to learn the secrets of the potters there. This he accomplished by marrying the widow of a potter, and after a sojourn of four years in Hizen he returned to Owari, and having discovered in Seto the necessary materials, he initiated a wonderful improvement, not only in the body but in the decoration of the ware. Since then Owari *Sometsuke* (blue and white) has attained great distinction and constitutes the bulk of the ware produced there. The production is carried on by the direct descendants of Toshiro, prominent among whom are Karvamoto Hansuke and Kawamoto Masukichi (*q. v.*). The porcelain itself is of the purest quality, the glaze extremely brilliant, the blue, rich and pure in tone. The Seto factories also produce flower pots in thick porcelain partly covered with a deep blue enamel, the decorations modeled in relief being in white. The cloisonne process is successfully used here, enamel pastes being inserted in brass or white metal *cloisons* in effective patterns, the most skilful artist being Takeuchi Chiubel. At Nagoya a light buff earthenware coated with a black or dark green lacquer is made. The inside of the pieces is covered with an opaque crackle glaze decorated with rude sketches of floral sprays. It is called Toyosuke after the inventor. He also makes graphically modeled figures of the household gods. In the village of Inaki, near Nagoya, is the kiln of Inuyama, who makes a gray stoneware covered with a thick opaque white glaze, decorated with foliage and trees. At Tokonabe on the coast reddish brown unglazed stoneware is made, whilst at Akazu, about two miles from Seto, both stoneware and earthenware are made, chiefly in the form of figures of gods and personages of Japanese mythology.

OWENS, J. B., POTTERY COMPANY, Zanesville, O. The quotation anent big oaks and little acorns would be applicable in the case of this firm, if only the change from the acorn to the oak had been effected more quickly. With the very modest capital of $300, Mr. J. B. Owens on January 11, 1885, started in business in Roseville, O., as a manufacturer of common flower pots. As may readily be imagined, the plant was not a very large one, a single nine-foot kiln constituting the firing capacity. Under Mr. Owens' energetic management the business quickly increased, and an advantageous offer being made to him from the town of Zanesville, he was quick to see the facilities it opened up, and in 1892 the business was removed there. The manufacture of colored glazed jardinières, etc., was commenced in 1895, and a very large trade was developed. In 1897 art ware in the Rookwood style was commenced, and, as Mr. Owens was fortunate enough to secure the services of capable artists, some really meritorious pieces have been produced. The work of the artist is enhanced by backgrounds of colored slips, beautifully blended, varying from a pale yellow to dark warm brown, or an olive green with liquid depths suggestive of the reaches of a river where the shadows of the trees fall thickest. An infinite variety of shapes and sizes is produced varying from an ash tray to vases quite six feet in height. Instead of resting satisfied with the success obtained it was apparently only a stimulus to further effort and wares of entirely different character, each one a class in itself, were pro-

duced in rapid succession. Of these brief mention may be made of Henri II. ware, or more properly speaking Faïence D'Oiron, in which the designs are incised in the clay and the spaces filled with colored slips. But neither in process of manufacture or in design do they resemble the famous ware, though the work is not without merit and some of the designs are extremely decorative. In Feroza ware the object aimed at has been cleverly attained. Antique shapes prevail, the coloring being a dark green bronze resembling oxidized brass, with an almost lusterless glaze. This ware, particularly in reflected lights, shows some elusive and beautiful tones. In Cyrano ware, filigree designs in white, bluff or brown are applied to a darker body. These are sometimes applied flat on the surface, sometimes as a band of ornament standing up from the base and showing the perforations, giving a rich jeweled effect. Good results are also obtained by the use of perfectly mat glazes, which when applied to plain shapes of graceful contour appeal strongly to the æsthetic instinct and insensibly grow in your admiration the more intimately you regard them. Nor should mention be omitted of the beautiful combinations of colored glazes, the range of palette being very extensive and varying from the tender pink of a blush rose to browns and olives of infinite depths. If Mr. Owens has been the master mind to direct the enterprise over which he presides, the artists with whom he has surrounded himself have contributed their quota to his success. Of these we may mention, in figures, Miss C. McCandlass, whose work has attained a well deserved recognition, and Miss Stevens. Miss Eberline paints some charming animal subjects, as does also Miss Timberlake, who is equally skilful in flowers. The Misses Blanche Mallen, Steel, Gray and Bloomer, are, perhaps, the best of the flower painters. Mr. Charles Niblock, a general decorator, has pursued some independent researches which are likely to be heard of later, whilst among the designers the names of Mr. F. G. Dodd and Mr. A. Radford should not be omitted. Miss McCandlass and one or two other of the lady artists are now busy perfecting a line of vases in L'Art Nouveau style, and which will probably be put on the market sometime this year. In addition to the characteristic

FEROZA WARE.

wares briefly mentioned, and most of which are illustrated, the firm have in abeyance a number of novelties which will see the light in due season, for experiments are constantly being made, and no matter what success is obtained there is ever going on tests and trials and developments of ideas, each waiting their turn for the opportune moment to perfect them and place them on the market. In addition to ornamental goods the J. B. Owens Pottery Company make large quantities of cuspidors—the production is about 1,200 per day the year round—filters and gas logs. They have a fully equipped printing office under the direction of Mr. G. Brush, and here are produced not only the commercial requirements of the house, but a monthly journal often illustrated in colors, which is widely distributed among the trade. A dining-room in which a course dinner is served for about 17 cents has proved a great boon to the employees. Since the above was written a disastrous fire has literally wiped out this magnificent plant with all its wealth of models, molds, etc., but the work of rebuilding was immediately commenced, Messrs. Owens in the meantime finding temporary quarters in a near-by factory.

CYRANO WARE.

OXIDE. The use of oxides was known to the Egyptians who employed copper for their turquoise blue and probably the oxides of several other metals for other colors. The same processes were known in Babylon and Assyria.

OXYBAPHON. A Greek wine cooler with handles at each side and standing on a small foot.

P

PADUA. According to Piccolpasso, 'this city possessed, about 1540, several manufactories of faïence, but very little is known of them. The name Padua occurs on dishes with figure subjects, accompanied by dates, and often by a cross. In the museum of Padua is a circular plaque dating from the end of the fifteenth century, representing the Virgin and Child between Saints Roch and Lucy, in white relief, lightly colored in places, executed after Nicolo Pizzolo, whose name is inscribed on the base of the Virgin's throne. Certain pharmacy jars with two handles, of mediocre art, decorated with

flowers, arabesques, and sometimes grotesques, are known under the name of vases *alla padovna.*

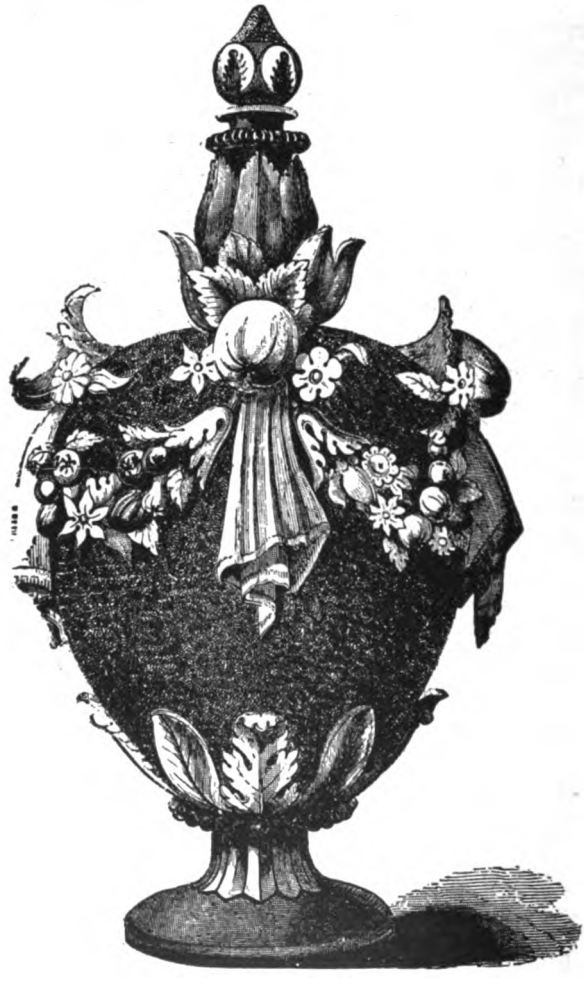
PAETSCH, THEODOR, Frankfort. Manufacturer of stoneware. Established 1840.

PAILLARD BROS., Choisy-le-Roi, one of the earliest to use color printing on pottery.

PALISSY, BERNARD. The perseverance of Palissy has almost passed into a proverb—his name is immortal. At the time when France had no pottery worthy of note this humble genius, with no knowledge of the potter's art, succeeded in producing faïence of singular qualities and original conception, the secret of the production of which may almost be said to have died with him. Born at La Chappelle Biron, in the province of Perigord, about the year 1510, he followed the trade of glass painting, as his father had done before him. He was poor and devoid of education, but the thirst for knowledge was highly developed in him, and he eagerly read such books as he could procure, acquiring in this way the rudiments of chemistry, geology and botany. When he had completed his apprenticeship he married and settled at Saintes, varying his occupation by portrait painting and land surveying. Soon after his marriage, fate, chance —call it what you will—placed in his hands an enameled cup of great value. Whether M. Brongniart is correct or not in asserting that this could only have come from Nuremberg is of little consequence, but, charmed by its beauty, he conceived the idea that could he but only reproduce the enamel, fame and fortune were both before him. The idea grew until it fairly mastered him, and from that time he had but one object in life. At the neighboring village of La Chapelle des Pots he learned the rudiments of the potter's art—his own profession had taught him something of painting and firing enamel colors, and on this slender basis he commenced his experiments. For years he struggled on, sometimes gladdened with a gleam of hope, at others groping blindly, but never wholly disheart-

BERNARD PALISSY.

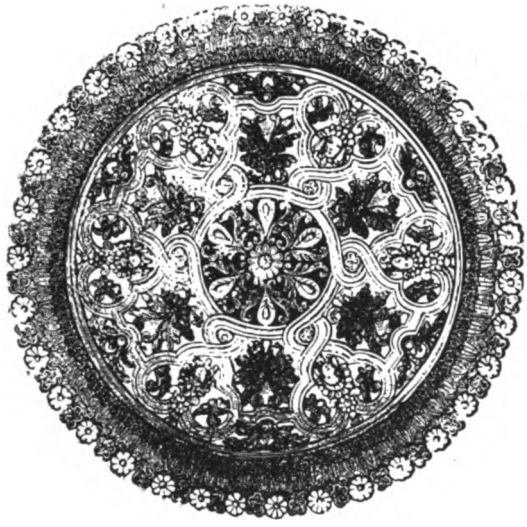
ened. The idea had grown within him until it had become a mania. He neglected his other business; one by one his children died, his wife, hollow-eyed and wan from want of proper food, pleaded with



VASE. PALISSY WARE, SIXTEENTH CENTURY.
SIR A. ROTHSCHILD.

him to relinquish his project; his neighbors reviled him, and all the time the kiln, with its insatiable maw, swallowed up everything until the direst poverty stared him in the face. For sixteen years he struggled, and then, with exhausted credit, he could no longer pro-

cure fuel to fire his kiln. Success, he felt, was within his grasp, and, undaunted by failure, he sacrificed his furniture for fuel. One by one the few domestic articles disappeared in the kiln, his wife and children, hungry and ragged, in vain imploring him to desist. If this failed it was of necessity his last experiment. The very last stick of furniture had been thrust in the kiln, the house had been stripped of every vestige of woodwork, and who shall attempt to portray with what emotion Palissy awaited the result. At last the time arrived when he would know whether he had been successful or—but



DISH (INTERIOR) BY BERNARD PALISSY.

he dared not face, even to himself the dread alternative. With trembling hands he drew the four pieces from the kiln—for a moment he dared not trust his senses—he looked again—*the enamel had fused,* and the success for which he had toiled so long had come. The mad enthusiast was now the success of the day, and the Queen, Catherine de Medici, and the nobles of her court took him under their protection and gave him orders for vases and figures to ornament their châteaux. For some years Palissy enjoyed untroubled reward for his years of toil and unflinching tenacity of purpose—courted by those who had previously reviled him as a madman. He became enthralled with the doctrines of the Reformation, devoted himself heart and soul to the cause, and in 1558 was arrested and imprisoned at Bordeaux, his kilns and materials being destroyed. Through the intervention of the king he was liberated in 1563, and set up a pottery

in Paris, where, until 1588, he lived and prospered; but a fresh wave of intolerance swept over the country, and he was in that year sent to the Bastile. Henry III. offered him his freedom if he would recant; but the stern old potter indignantly refused, and he was sentenced to execution, but died in 1589, before it was carried out, nearly eighty years of age. The faïence of Palissy is ornamented with figures in relief—mythological, historical and allegorical, usually finished in bright colors, in which yellows, blues and grays predominate. His enamel does not approach that of Luca della Robbia, or even of the Normandy ware. It is by the natural objects he placed on his faïence that he is best known, his *"pieces rustiques,"* ornamented with fish, snakes, frogs, shells, plants, etc., being remarkably true to nature, and all modeled from subjects indigenous to the immediate neighborhood of Paris, where his best works were produced. It is a fact that cannot be ignored that during all Palissy's experiments he was aware that the making of the enamel was no secret in Italy, and that a journey to any of the potteries in Italy would have taugh him all, possibly more, than he discovered in those terrible sixteen years of experimenting at Saintes. Palissy, during his confinement in prison occupied his time in writing his autobiography, but it gives very few details of the process employed by him. Philosophical, religious and artistic meditations, singular as emanating from the pen of a workman, were also published by him, which M. Lemartine says are "real treasures of human wisdom, divine piety and eminent genius, as well as of great simplicity, vigor and copiousness of style. It is impossible after reading them not to consider the poor potter one of the greatest writers of the French language. Montaigne is not more free and flowing; Jean Jacques Rousseau is scarcely more graphic; neither does Bossuet excel him in poetical powers." Under the successors of Palissy the art quickly degenerated, and was soon altogether abandoned. Avisseau of Tours (*q. v.*) and his son have made excellent reproductions of Palissy ware, as has also Pull, of Paris, a plate by the latter having been purchased by the South Kensington Museum as a veritable Palissy.

PALLANDRE, M., a Parisian flower painter, whose works are deservedly prized. He has done some fine work for Haviland & Co.

PALMER, of Bagnall, is erroneously credited with the discovery of salt glazing in 1680. The story goes that a pot full of salt water had been left on the fire, and that, boiling over, the brine had covered the outside of the pot with a bright glaze, which the potter immediately turned to account and put into practice at his pottery. There are sev-

eral all-sufficient reasons to show the absurdity of this story, one of which is that salt glaze would not form in an open place. (See Salt Glaze.)

PALMER, H., Hanley. He made imitations of Wedgwood ware, and afterwards entered into partnership with J. Neale (*q. v.*).

PANKHURST, J. W., & Co. (See Johnson Bros.)

PAON (LE). The Peacock. Sign of a fabrique of faïence founded at Delft in 1651, and which existed until the end of the eighteenth century. The products of this manufactory usually carefully executed, often bear as mark the letters of the name of the sign formed in monogram, a contraction of the letters D. Pauw. At this manufactory there were made faïences decorated in polychrome with flowers, etc., and heavy broken lines which led to the appellation "thunder storm faïences." They are remarkable for the beauty of their intense red enhanced by permanent yellow. (Mark H, page 385.)

PAREE, PIETER. Master potter established in 1759 at Delft at the sign of the *Metal Pot*. The rather rare products of this manufactory during the directorship of P. Paree are marked with a monogram formed by the initials of the sign.

PARENT, director of the Sèvres manufactory from 1773 to 1779.

PARTHIAN FURNACES. (See Murrhine.)

PARIAN. This beautiful body used for busts, statuettes, etc., is composed of three-fifths china stone and two of feldspar. It is non-plastic and therefore cannot be modeled, so the casting or coulage process is employed. Its origin has been disputed, both Mintons and Copelands claiming to have invented it. Mr. W. H. Goss, who when the experiments were being conducted was a young boy, knew all the parties concerned and afterward wrote the particulars of the discovery for a book published at The Hague in 1864, entitled "Vergslag der Wereldtentoonstelling te London in 1862," which was an important work on the London exhibition, produced by order of the government of Holland. Mr. Goss states that it was during the year 1845 that experiments were made at the manufactory of Mr. Alderman Copeland to obtain a ceramic material that should resemble marble. The experiments were undertaken at the suggestion of Mr. S. C. Hall, the editor of the Art Journal, who recommended that reductions from the sculptures of the great modern masters in such a material would be appropriate works to be offered as prizes by the Art Union of London. In pursuance of this idea a reduced model of Gibson's Narcissus was sent to the Copeland works to be reproduced as a sample, so soon as the experiments in hand should have led to a satisfactory result. The experiments were being made by

two or three experienced potters at Copelands', but the beautiful material was first produced there by Mr. John Mountford, who had served his apprenticeship at the old Derby china works during its last days, and who with many others of the Derby potters had migrated to the improving and rapidly extending potteries of Stoke. After having produced satisfactory specimens of the new material, then called "porcelain statuary," Mountford himself then made the first statuette on Christmas Day, 1845, from the model of Gibson's Narcissus, before alluded to. This being submitted to Mr. Gibson he pronounced it to be the best material next to marble, for the reproduction of sculpture, and the new body soon became an established and important addition to the ceramic branches. About the same time Messrs. H. Minton & Co. commenced experiments for the same purpose, and very shortly afterwards brought out a similar body which they called "Parian." The tint of Minton"s Parian closely resembled that of newly chiseled Parian marble, while Copelands' resembled the same material toned down by a little age. This body is often alluded to as "Parian marble" which is a misnomer. The word "Parian" is no doubt derived from Paros an isle in the Egean Sea. Hence the chronicles of the city of Athens engraved on marble in the Isle of Paros, which contains a chronicle of events from 1582 B. C. to 264 B. C., are alluded to as "Parian chronicles," and the marble of that island would in like manner be described as Parian marble, a term not applicable to its ceramic imitation.

PARIS. Manufactories of earthenware and faïence have always existed at Paris, but from some unexplained reason no records have been kept and little is known of their history or of the exact nature of their manufactures. The Parisian pottery of the first half of the eighteenth century appears to have been of a somewhat coarse description, the enamel grayish and often blistered and uneven. The drawing of the designs was bold and generally encircled with a well defined black line. The borders, usually copied from Rouen designs, were clumsily executed. Much of the faïence bears facetious and bacchanalian inscriptions and the centers were occupied by names or figure subjects rather coarsely painted. Most of it was decorated in blue, though a few manufacturers attempted the polychrome designs of Rouen, replacing the distinctive Norman red with a dark yellow ochre, which often assists in determining their origin. The only manufacturer of this period known with certainty is that of Digne, who was commanded by the Abbess of Chelles, daughter of the Duc d'Orléans, who was regent of France during the minority of Louis XV., to manufacture pharmacy pots, etc., for use in her

abbey. These are decorated in blue and citrine yellow, and are emblazoned with the arms of the Orleans family. Later the paste was improved, the enamel became whiter and the decoration more carefully executed. The finest productions of the time were the white faïence stoves and pier chimneys ornamented with wreaths and columns surmounted by baskets of flowers, which were really very artistic. One of the best manufactories was that of Sieur Ollivier in the Rue de la Roquette. Of the following porcelain manufacturers we have spoken elsewhere: Manufacture of the Faubourg St. Lazare; Manufacture de la Courtille; Porcelaine a la Reine, Rue Thiroux; Rue de Bondy (Duc d'Angoulême); Pont aux Choux; Rue Poppincount; Du Prince de Galles; as also of St. Cloud, Sceaux and Sèvres. Reference is also made elsewhere to the following existing houses; T. Deck, Colinot, Parvelle, Pull and Barbijet. Much beautiful work is executed in Paris by *chambrelans*, porcelain painters who work in their own dwellings, *en chambre*, and decorate, or sometimes employ a numerous staff to decorate, the white ware made in Paris or Limoges, for the large Parisian retail establishments.

PARVILLE, Paris. Manufacturer of faïence somewhat in the style of Longwy.

PASQUIER, DU. Founder of the Vienna factory. (See Vienna.)

PASSERI, G. An Italian writer on ceramics late in the last century. His work on Majolica is the one from which we derive much of our knowledge of Italian majolica. It was originally published in 1752 at Venice, at Bologna in 1775, in 1883 and again at Pesaro in 1833, and finally in Paris in 1853. Passeri was born in 1694 and died in 1780.

PASSY. A manufactory of porcelain contemporary with that of St. Cloud; is referred to by contemporary writers, but we have no further information respecting it.

PASTILLAGE. (Decoration by the process of). This special style of decoration has been employed since the fifteenth century on glazed pottery made in the west and north of France in the neighborhood of Beauvais, and especially in Switzerland in the canton of Berne, notably at Heimberg near Thoun where it is still used. The process of this decoration consists in the use of boiling liquids, colored by oxides of antimony, copper, cobalt and manganese, contained in small bowls whose narrow spouts are supplied by a quill, through which the color escapes drop by drop or in tiny streams, thus forming in delicate lines or dots, flowers or armorial bearings and even figures, rather crude but in firm and decided tones. Some-

times the clay is covered by a colored or white engobe which permits infinite variety in the decoration thus obtained.

PATANAZZI, THE. Painters on faïence who worked at Urbino at the end of the sixteenth and the beginning of the seventeenth centuries. The eldest, who was doubtless a pupil of Orazio Fontana, whose style he followed, seemed to be *Antonio,* who thus signed a beautiful vase ornamented by grotesques of a remarkable execution, in the Spitzer collection. Next to him *Alfonzo,* to whom is attributed the mark G. and whose name is frequently found in full: Alfonzo Patanazzi, Fecit, Urbini, 1606. Alfonzo Patanazzi Fe Urbini in Botega di Jos. Batista Boccione, 1607. Later *Francesco,* whose works signed F. P. bear the dates 1608 and 1717, and last *Vincenzio,* who, proud of his precocious talent, signed some very mediocre pieces which he painted, with his name and the mention of his age: Vincenzio Patanazzi de Anni Dodeci. Vincenzis Patanazzi Da Urbino di eta D'anni tradeci del 1620.

MINTON PÂTE-SUR-PÂTE VASE BY SOLON.

PÂTE. The French word for paste or body of pottery.

PÂTE. CHANGEANT. A body invented by M. Regnault, of Sèvres, which in day light is a soft gray, but changes in an artificial light to a beautiful pink. It was also very successfully produced by Mintons.

PÂTE DURE. Hard porcelain (*q. v.*). (See also Porcelain.)

PÂTE TENDRE. Soft or artificial porcelain. (See Artificial Porcelain and Porcelain.)

PÂTE-SUR-PÂTE. A process of decoration invented or revived by Louis Robert, the director of Sèvres, in 1850, though it was more than ten years after before any satisfactory specimens were produced. It consists in painting, on a body stained with metallic oxides, with white slip, one thickness being laid on another until the desired strength is obtained. The work is done partly with a brush, partly with sharp iron tools, which scrape and smooth the inequalities of the brush work, incise the details and delineate the outlines. In the hands of an artist most beautiful effects are obtained, the translucency of the clay giving soft lights of exceeding delicacy. The artist is all the time under the disadvantage of not knowing what degree of translucency will be apparent in certain parts after the firing, and he has nothing but his experience and judgment to rely on. The beautiful conceptions of M. Solon (*q. v.*) are familiar to all lovers of artistic pottery and it is one of these we illustrate.

PATERA. A vessel employed by the Romans in their sacrifice, in which they offered consecrated meats to the gods. It was also used to receive the blood of the victims. Originally they were made of pottery but later metals were substituted.

PATINA. A basin or bowl of earthenware used by the Romans to serve food in. Pliny states that when Vitellius wished to obtain an enormous bowl in which to serve up his famous ragoût, which he styled the Ægis of Minerva, he had an oven purposely constructed to bake it, which cost a million sistertia.

PATRAS. Proprietor of a pottery at Lyons in 1776.

PAUW, D. A manufacturer of Delft at the sign of the Peacock. He was established in 1651, and the works were in existence until the end of the eighteenth century.

PAVIA. After Giorgio Andreoli had quitted Pavia he settled at Gubbio. We believe there existed no faïence fabrique in this city previous to the end of the seventeenth century; that is to say, at the time when the Cuzio decorated with legends and foliage engraved on their peculiar brown dishes. (See Cuzio.)

PEARSON & HANDCOCK, The Abbey Pottery, Cobridge. Tradition says this old pottery was formerly worked by the monks of Houlton Abbey, the ruins of which are still in existence, about a mile and a half away. Mr. E. M. Pearson in 1862, whilst repairing the roof, found cut on the purlin the date 1703. The above firm commenced business there about 1846. Mr. Handcock retired in

1851, and Edward Pearson continued the business under his own name until 1872, when he was succeeded by Henry Meakin, who continued until 1879, when he was succeeded by Wood & Hawthorne. Colliery operations have undermined the old pottery and it is now abandoned. Cobridge Hall, the residence of the Misses Adams, who owned the pottery, is on the opposite side of the street. Hales & Adams were potters in Cobridge in 1787, and they probably occupied the Abbey Works. In 1851 Pearson manufactured exclusively for the American market, and he was the original maker of the Wheat or Ceres pattern, which became very popular and was copied by several other manufacturers. This was first produced in 1860. His mark was the English coat-of-arms and his name.

PEARSON, EDWARD M., son of the above, and associated with him from 1860 to 1872. In the following year he came to America and has been here ever since. At this time the manufacture of white ware was an unimportant industry, Knowles, Taylor & Knowles having drawn the first kiln of white granite ever made in East Liverpool, September 5, 1872, so that Mr. Pearson's arrival, with his practical knowledge, was at an opportune moment. He became associated with Homer and Shakespere Laughlin, and the citizens gave them the ground (and a bonus of $5,000) on which the first Laughlin factory was erected, Mr. Pearson planning and building the same. In 1875 he planned and built the Dresden Pottery; remodeled the Phœnix for Brunt & Co. in 1876 and managed the same until 1878, finding time in the meanwhile to draw plans for the Ben Harker Pottery (now Wallace & Chetwynd), and in the following year to remodel the works of the Harker Pottery Company. He was on the point of returning to England, but was called to Wheeling to assist in an undertaking there, and planned and built the Wheeling Pottery. He was the manager of the business until 1889, when he was elected president and general manager, continuing as such until 1893, which closed his busy career as a potter, when he was succeeded by Mr. Franzheim, though he still retains his interest in the business. From this rapid summary it will be seen how important a factor Mr. Pearson has been in the development of the earthenware business in America.

PEGG. A painter at the old Derby China Works.

PELISSIER, PIERRE. (See Lille.)

PELEVE, PIERRE. The first director of the Sincenny factory (*q. v.*).

PELLIPARII, THE. A family from Castel-Durante, who, on

establishing themselves at the capital city of the duchy, took the name of Fontana (*q. v.*).

PENNINGTON, SETH. A manufacturer at Liverpool. He made delft, fine earthenware, and, later, china. His pieces are dated from 1760 to 1779. His manufactory was at Shaws Browe, and there is in the Hanley Museum a very large punch bowl painted by Robinson and manufactured by him. He made a very beautiful blue color, for which a Staffordshire manufacturer offered £1,000 (about $5,000) for the receipt, an offer which was, however, refused. This receipt Seth confided to his brother James, who, when intoxicated, told it to a companion, who sold it to Staffordshire manufacturers. Pennington's china body, the memorandum of the receipt of which is dated March 18, 1769, was composed of bone ashes, 60 lbs.; lyme sand, 40 lbs.; flint, 35 lbs.; frit; to every 60 lbs. of above, 20 lbs. of clay. This is interesting as showing the use of bones in china body at this date. M 171.

PENNINGTON. A figure painter at Worcester early in the present century.

PENNIS, ANTHONY. Manufacturer at Delft. Mark, A. P.

PENNIS, JOHANNES. Manufacturer at Delft. Mark, J. P.

PENNSYLVANIA. China was manufactured in Philadelphia as early as 1770, but it is not known how long the works were carried on. William Ellis Tucker, some time between 1816 and 1830, made first a non-translucent ware, and afterward china. This is more fully dealt with under the heading "Tucker & Hulme." In Bucks and Montgomery counties, Pennsylvania, a slip-decorated ware on a common red body was made during the last half of the eighteenth and first half of the nineteenth centuries. The tulip was largely used as a *motif*. The workmanship is extremely crude, but they are interesting as showing the expression of an art feeling among an uncultured people, and are always extremely original. The employment of inscriptions is also a good feature. Mr. E. A. Barber has unearthed a good many specimens of these wares and has written entertainingly about them and their makers, who it appears made mugs but did not drink beer, and were so æsthetic that when the pattern on an oval dish ran lengthwise "it was placed when in use on the table with the narrow side toward the carver, instead of the broad side."

PENTHIEVRE, DUC DE. The manufactories of Sceaux and Orleans were both under his protection. He was Grand Admiral of France.

PEORIA POTTERY COMPANY, Peoria, Ill. Manufacturers of white granite and semi-porcelain. M 172.

PERGER. A painter at the Royal Vienna Works.

PERL, GEORGE. Succeeded Leithner as director of the Royal Vienna Works.

PERRIN-VEUVE. She made faïence at Marseilles toward the end of the eighteenth century, and applied for permission to make china, but of the latter no specimens are known. Her faïence is marked V. P., the letters being joined. M 173.

PERRINE, M., & SONS, Baltimore, Md. Established in 1827. Manufacturers of flower pots, black glazed ware, etc.

PERSIA. The greatest diversity of opinion exists as to Persian pottery. Some writers claim that porcelain was never made in

PERSIAN BOWL, WITH POLYCHROME DECORATION.

Persia, while others go to the extent of saying that much of the porcelain catalogued in our museums as Chinese is really Persian. Certainly as far back as 1426 Persian influence must have been strongly felt in China, if, indeed, the porcelain described as Chinese was not actually made in Persia, and extended to the sixteenth and seventeenth centuries. The Aster pattern is an example of this, the set arrangement of which has nothing in common with Chinese ornament. We know that Chinese workmen visited Persia, and that the traffic from India, China and Japan passed through the Persian Gulf to Europe, mostly from the port of Gombron (*q. v.*), but the arguments seem mostly to favor a negation as to a true porcelain being made by the Persians—a view followed by Major R. Murdoch

Smith, whose long residence in Persia and familiarity with their manufacturers entitle his judgment to respect. Long before the Europeans made china the Persians made such beautiful earthenware that it well might be mistaken for Chinese porcelain as regards design, color and form. The body of the oldest specimens is porous and essentially earthenware, and many of them bear Chinese marks, either made by Chinese workmen brought to Persia, or by Persian workmen in imitation of Chinese. Major Smith classifies Persian pottery as follows: The finest, which also most closely resembles the Chinese, is of a very hard paste, with a pure and brilliant glaze, the ground white, with designs in azure blue. Some have designs in relief. This kind appears to have survived the longest in Persia, the earthenware of the present day being a degenerated form of it. The second kind is less imitative of the Chinese, and the paste is softer and more porous; the blue is brighter, the glaze less even, and the designs not so well drawn. The third class is harder and denser than the others; the designs are of a blackish color on white ground, the drawing sensibly deteriorating. The glaze is thick and white, and seems to have some affinity to the stanniferous enamel said to have been invented by the Arabs in the fourteenth century. If the design includes figures, the faces are left blank, indicating they were made by Mussulmans of the Sunni sect, whose tenets regarding graven and painted images are very rigid. Most of the vases of this class are somewhat translucid. The fourth kind is a translucid white earthenware somewhat resembling the transparent porcelain of China. "It is generally thin; many of the articles have gaufrures, or are varnished with a single color outside, in which case they are a little thicker than the others. The paste appears to be harder than that of the other kinds. The examples, which are all small, have no maker's marks." The fifth kind is also translucid, but very thin, and has generally lace-like designs. It is possibly more of a porcelain than a true earthenware. The sixth kind comprises all the common pottery made of reddish clay and covered with a single color. To this division belong the large pieces of great thickness and weight, many of which are imitations of the Chinese Celadon. This is probably of older origin than most of the others, as fragments of it are found mixed with bits of common unglazed pottery among almost all the ruins of Persia. In the ruins of Rhages (a city whose origin is unknown, but which is mentioned in the Book of Tobias, and was undoubtedly one of the principal cities of Persia long before the Christian era), small unglazed pear-shaped pots have been found, the body of which is a dense stone-

ware, and with rudely executed figures or written characters in relief. Similar pots have been found in Egypt and other countries, but their use has not been determined, the Persians having no traditions as to what purpose they served. The first and second kinds of this classification before arriving at the state of perfection which they ultimately attained, must be of very ancient date. Mr. G. de Morgan, the eminent explorer, it is now reported, has discovered the site of the ancient city of Susa, near the Persian Gulf, which was destroyed by Assurbanipal, 645 B. C., and has found there many interesting remains which when examined may throw further light on the pottery of Persia. Mr. de Morgan writes: "The examination of the principal mound of Susa, that one on which stood the Acropolis and where certainly were erected the oldest buildings, disclosed many scientific treasures. At the top are the débris left at the beginning of our era, or during the mediæval ages, by the Arabs, the Sassanids, and possibly the Parthians; below you come across the ruins of the Archæmenian epoch, the crumblings of which cover a thickness of some seven or eight inches. These beds are full of broken bricks or glazed pottery. It is below the mass of débris, the oldest dating back to the Achæmenian epoch, that are found the Elamite remains. These are found in a thick bed of earth, ashes and debris of all kinds, the date of which is easily discernible by the nature of the ceramics that they contain. The Elamite pottery, the fragments of which are very abundant in all the mounds of Elam, is particularly interesting. At Susa the paste is sometimes coarse, or very fine, made with the wheel, and sometimes very light. The most elaborate vases are ornamented with geometric patterns, painted in brown, white or red, on a yellow or reddish ground. This pottery indicates on the part of the potters who made it a great amount of practical knowledge and skill. On the same level, and mixed with the fragments of pottery, are found at Susa fragments of alabaster, vases in hard stone similar to those of Egypt, and pieces of statues, some of them bearing inscriptions in Susian. Below the Susian débris are remains which I will designate as prehistoric, because there are in this level cut flints, nuclei, knives, splinters, blades, and coarse pottery, hand-made, without use of the wheel. This stratum may have a thickness of ten to twelve meters in the largest mound of Susa." The allusion to "fragments of alabaster vases in hard stone" may possibly help to elucidate the problem of the Murrhine vases of the Romans, which Herodotus states were "baked in Parthian furnaces." In addition to the classification given there remains the earthenware *à reflet metallique* or with metallic luster.

The body corresponds to the first and second kinds, but the covering is altogether *sui generis*. Fragments have been found at Rhages, which was finally destroyed about the middle of the thirteenth century, so that the débris found there must at the very latest be of that date. But the city probably existed several centuries before the present era, so these pieces may date two thousand years ago. The manufacture continued as late as the time of Shah Abbas (A. D. 1586), in whose reign tiles with metallic lusters were still made. Of this *à reflet*, two kinds are found in Persia—one, yellow on a white ground, the other lapis-lazuli blue. Of the former there are several varieties, the yellow being more or less dark, and giving several *reflets*. The latter and rarest is of one style only. The ancient wall tiles *à reflet metallique* are of more recent date, and, like the earthenware of which they are imitations, they appear at first to have been made with even surfaces, inscriptions and other ornaments in relief being added at a later period. Most of them date from the early part of the eleventh century, and some of them are said to be of great size, six to eight feet in length. Almost all these tiles probably belonged to mosques and other sacred buildings, and bear inscriptions from the Koran; and as these edifices are closed to Europeans, the manner in which the few known specimens existing were procured is not to be too thoroughly investigated. A remarkable exception to this rule is a lustered tile with figures in relief, but without inscription, said to have been found in an old castle in Mazanderan, and which must date from before the Mohammedan era (A. D. 622), as for a long time after the establishment of the new religion the Persians obeyed the precepts of its founders by refraining from any representation of the human form. The figures on this tile represent the first episode of the story of Bahram Gur. Bahram, while out hunting with his favorite wife, seeing an antelope scratching its ear with one of its hind feet, bade his wife see if he could not pin the foot and ear together with his arrow. He accomplished the feat, but was so annoyed at the slight admiration bestowed upon his skill

PERSIAN TILE.

by his wife that he immediately divorced her. She thereupon betook herself to a high castle, where every day she carried a calf to the top of the tower and down again, beginning with its birth and continuing until it had become a full-sized cow. One day the king, passing that way, was struck by observing a cow on the top of the castle. Wondering how it got there, he sent his servant to inquire. In reply his former queen appeared carrying the cow easily on her shoulders. In expressing his great astonishment at such a feat, she said it was merely a matter of practice, and no more worthy of admiration than his own dexterity in the use of the bow. The answer pleased him, and she was at once restored to favor. A fragment of a tile from the ruins of Rhages shows that the modern art of gilding earthenware "by the application of gold leaf to the surface" was successfully practiced in Persia more than six hundred years ago. Wall tiles have continued in use in Persia until the present day, both wall and floor tiles being made at Teheran, many of which are by no means deficient in artistic merit. Pottery was made all over the kingdom, at Rhages, Kashau, Koom, Meshed, Ispahan, Nain, and Teheran. Nearly everything was made for use, and but little for mere ornament or show (see Spittoons), and it shows how generally diffused were artistic taste and good workmanship in the country. The decorations had a great amount of similarity, flowers of various kinds, both natural and conventional, constituting the chief feature. Our illustrations convey a fair idea of the designs, but the brilliant colorings in blue, turquoise, green, red, purple, olive green and indigo must be seen to be appreciated. No attempt was made to imitate natural colorings—the whole scheme was decorative, and if a purple cow harmonized with its surroundings better than a dun or brown one, the artist did not hesitate so to depict it. It was from Persia that the Arabs borrowed much of their art, and which they carried to Spain, if, indeed, Persian workmen did not execute much of the work. Persian workmen were no doubt employed in large numbers in decorating the mosques, etc., in the Arab capital, and from this probably arose the so-called Arabian or Arabesque style. We have already seen that China was indebted to Persia for pottery *motifs*, as was also probably India, as earthenware formed one of the principle articles of export to India in the seventeenth century. The Dutch, too, according to Chardin, were indebted to them for their skill and success in making pottery, and the Dutch traders sent Persian wares to Europe, where they passed them off as Chinese. Several ceramic writers speak of the "grains of rice" pattern as being of Persian origin. Major Smith

does not speak of it; an example we shall imitate. (See also Ispahan, Rhodian, Shah Abbas, Spittoons.)

PESARO, Italy. This little city in the Duchy of Urbino has always possessed numerous potteries. Passeri, who was born there, and who has furnished precious information on the faïence industry, affirms that a manufactory of majolica was established there in 1462, and that it is to the workshops of this industrious city that we must attribute the specimens of ancient style with yellow metallic *reflets;* and according to him the manufactures became greatly increased because of the protection accorded to the potters of the city by Guid Ubaldo II., who came to the Duchy of Urbino in 1538, and had a sumptuously decorated palace constructed at Pesaro. In the oldest pieces of *reflets metalliques* attributed to Pesaro, the reverse is simply glazed; later it was covered on both sides by a white enamel, and is decorated on the reverse with concentric lines in a shade of flame yellow, which, in default of marks, serves to distinguish the producers of this fabrique. Toward the end of the sixteenth century a great many pieces bore in full, often with a date, the mention *"Fatto in Pesaro."* Sometimes, but rarely, this mention is accompanied by the name of the artist or manufacturer: La Chacia del Porco, Chalidonio Fatto in Pesaro, 1541; Fatto in Pesaro, 1542; in Bottega de Mastro Geronimo Vesaro, I. P. It seems to have been Pesaro that first produced faïences ornamented with portraits and amatory devices (*amatorii*) that held such an important place in Italian ceramics, and that are valuable in giving interesting information regarding the arrangement of coiffures and dress of ladies of the sixteenth century. Like all other manufactories of Italian majolica, that of Pesaro ceased to produce any artistic work at the end of the sixteenth century. In the latter part of the eighteenth century, under two painters of Lodi, Filippo-Antonio Callegari and Antonio Casali, it again became active, and produced faïence that has nothing in common with the ancient products, but, following the fad of the day, sought to imitate Chinese porcelain. At the Sèvres Museum is a plate in Chinese decoration enriched with gold and signed in gold on the reverse, with marks K and L; and chance has recovered a plate of Chinese porcelain with the same decoration, which enables one to see how the Pesaran artists interpreted the porcelain that they copied thus in faïence.

PETERS & REED, Zanesville, Ohio. Colored glaze, jardinières, etc.

PETERYNCK obtained in 1751 the privilege of manufacturing porcelain at Tournay. He engaged principally English workmen, and in 1759 the town council decided to send for an English Jesuit priest

at the expense of the town to convert them to the Roman Catholic religion. The *bleu de roi* produced here equaled that of Sèvres. It is principally in this manufactory that the best imitations of Sèvres ware is produced. Peterynck was a native of Lille, France.

PETIT CHÂTEAU DE MADRID. A building erected in the Bois de Boulogne, Paris, by order of Francis I., and known respectively as the *Château de Faïence* and *immense vaisselier.* It was composed exclusively of terra-cotta, enameled earthenware and enamels. The pottery decorations were made by Italian workmen, among whom was Girolamo della Robbia, son of Andrea and grandson of Luca della Robbia. The château was destroyed by fire in 1792, and, with the exception of some enamels in the Musée de Cluny, nothing now remains of that royal whim, as the terra-cotta and Italian faïence ornaments were sold to a pavioni, crushed and turned into cement.

PETIT, Lille. China manufacturer. A. D. 1778.

PETIT, JACOB. Established in 1790 at Belleville, Paris. Later he removed to Fontainebleau, where he made imitations of Dresden china. M 174.

PETUNSTE, or Cornish stone. Feldspar of a brilliant white, used with china clay or kaolin in the composition of porcelain. Petunste fuses at the heat of a porcelain furnace, while kaolin does not at the same heat. Petunste gives the translucency to porcelain, and kaolin the strength to uphold the piece during the firing.

PHILIPS, J., Hylton Pottery, near Sunderland. Founded in 1762. The products were principally earthenware similar to that of Staffordshire.

PHŒNICIA. The discoveries of General L. P. Di Cesnola in Cyprus and the splendid collections of Phœnician pottery in the Metropolitan Museum of Arts in New York, have revealed much that was before unknown and more than suggested the origin of Greek art. The discoveries were of a most heterogeneous character, some specimens probably preceding the conquest of Cyprus by the Egyptians (1440 B. C.). Egypt, Assyria, Tyre, Greece and Rome, each had a distinct influence, and their characteristics may be plainly traced. Some grotesque figures such as ibises with heads turned upside down, probably relics of the art of an original race, suggest the monstrosities of the Chinese. The early specimens were decorated with checks, zigzags, and diamonds, not indiscriminately placed, but arranged in set patterns. The Egyptian influence is then felt, birds, fishes and lotus flowers being combined with Phœnician symbols. The advent of Greece was not at first marked, but eventually they introduced the pictured decorations, and in the sixth

century, B. C., Phœnician art was merged in that of Greece. Unglazed cream white and brick red covered with a white slip, were succeeded by lustrous ware both red and black, both with and without decorations. Then come the Greek painted vases and objects slightly baked in terra-cotta. No enameled specimens have been found. Many of the forms were very ingenious. A circle of small vases on a hollow ring form one vase, the liquid rising to the same level in each. Puzzle jugs were largely made.

PHŒNIXVILLE, Pa. A pottery was established here in 1867, terra-cotta wall pieces such as boars, dogs and stags' heads being made. After the acquisition of the molds of the defunct American Porcelain Manufacturing Company, of Gloucester, N. J., Parian of a medium quality was produced, chiefly in the shape of lithophanes or transparencies, the designs being mostly copies of the German ones. After 1880 so-called majolica was extensively produced. The factory was closed from 1892 to 1894, when a new firm was formed.

PICCHI, GEORGIO, the younger, of the Durantine family, was a painter at Urbino, and pieces signed by him are extant. Borders of cupids among clouds or covering the service is a favorite decoration.

PICCOLPASSI, CIPRIANO. Author of an extant MS. of the sixteenth century giving very explicit details as to the manufacture of Italian majolica, from the gathering of the clay from the bed of the River Metauro, to the final firing of the ware. It is from this MS. that Passeri's (*q. v.*) work was compiled.

PIETER, IERONIMUS (also called Pieter van Kessel). Master potter established at Delft, where he founded about 1639 the fabrique at the Sign of the Metal Pot. To him are attributed faïence decorated in camaieu blue and marked with the initial P.

PIETERSZ, HERMAN. Born at Harlem and considered by M. Havard as the promoter of the faïence industry at Delft, where he established himself about 1584. To him are attributed the fragments of paving bricks forming part of the collection of Dr. Mandl, and decorated in camaieu blue with an allegory designed to commemorate the death of William the Silent.

PIETERSZ, IAN. Faïence manufacturer at Delft in 1668. He must have worked a long time with Ludwig Fictoor, for many fluted pieces of polychrome decoration bear his monogram placed beneath that of Fictoor. Others are simply marked with his own monogram.

PILKINGTON TILE AND POTTERY COMPANY, Clifton Junction, near Manchester. Mr. William Burton founded these works in 1893, and in conjunction with his brother Joseph still conducts them, and they are to-day probably the largest makers of decorative tiles in

England. Such a success in so short a period is phenomenal, and deservedly so. Both are men of high scientific attainments, and there was no problem in pottery-making they were not capable of solving. *The* problem was, that in view of the fact that the labor-saving machinery of to-day had largely resulted in the loss of all

THE IRIS.
M. MUCHA.
PANEL OF SIX-INCH TILES.

SIGHT.
WALTER CRANE, R. I.
PANEL IN ONE SLAB, 30 X 12.

artistic quality in the work produced; how were they to demonstrate that the absence of artistic merit was not a necessary accompaniment of modern methods of production? Probably the best authority in England on decorative art is Mr. Louis F. Day, and under his artistic guidance they gathered together designs by such well-known artists as Mr. Walter Crane, Mr. C. F. A. Voysey, Mr. Edgar Wood,

M. Mucha and Mr. Louis F. Day himself. Such an aggregation of talent could not fail to effect splendid results, when combined with the scientific knowledge of Mr. William and Mr. Joseph Burton. Some idea of the quality of these designs may be gathered from our illustrations. That these designs may be properly and intelligently reproduced it is necessary to put the work in the hands of something more than a mere copyist, and Messrs. Pilkington have been fortunate to find artists capable of infusing the proper feeling in their work in the persons of Mr. John Chambers, Miss Tyldesley and Miss Briggs, whose work cannot be too highly commended.

FISH AND LEAF.
C. F. A. VOYSEY.

TULIP TREE.
C. F. A. VOYSEY.
SIX-INCH TILES.

The work is executed in colored slips. The more conventional designs in rich colored glazes are just as carefully treated, and most beautiful effects are obtained. Apart from these triumphs of brush and pencil are the no less important results obtained by the Messrs. Burton Brothers. One of these is an egg-shell glaze, a perfectly durable and impervious glaze, possessing only the sheen of an egg-shell and therefore free from the glittering reflections which prove so distressing on large wall surfaces. Mr. Joseph Burton is credited with their Sunstone glazes, which contain clouds of golden crystals in the glaze, thus resembling the mineral known as Sunstone. This effect they are able to produce in a variety of

colors. At the Paris Exhibition Messrs. Pilkington had a wonderful arrangement of colored glazed tiles designed to show how the ceramist chemist having at his disposal not more than four or five coloring oxides which can stand the necessary heat, proceeds by skilfully graduated mixture to produce a range and variety of shades of colors as diversified as they are marvelous.

TILE PANEL.
LOUIS F. DAY.

PILSBURY, R. W. Born at Burslem in 1830, he was apprenticed to the trade of china painter at Alcocks, of the Hill Pottery, at an early age. The debased style of flower painting then in vogue did not satisfy him, and when the Burslem School of Art opened, he was one of the first to attend its classes. It was not long before he distinguished himself among his fellow-students, gaining no less than twelve national medals. In 1851 he gained a scholarship and was sent to the Paris Exhibition to report on the decoration of china. Afterward he returned to Burslem and worked as a flower painter at the Hill Pottery until its close. After a short stay with Messrs. Brown-Westhead, Moore & Co., he took employment with Messrs. Mintons and remained with them for more than twenty years. He left them to accept a position as art director for Messrs. Moore Brothers, Longton, whose refined productions are well known, and here he continued until his death in 1897. Mr. Pilsbury was probably the finest ceramic flower painter England has produced. He was an earnest student of nature, and in all his work, so delicate in color, yet with a touch correct and spirited, there is evidence of his appreciation and love of nature impossible to mistake. Mr. Pilsbury was esteemed as a man no less highly than as an artist. Courteous and unassuming, of kindly disposition, the amiability of his character endeared him to all his friends.

PINTOBASSO established a hard porcelain factory at Vista Allegre, near Oporto, in 1790. It was in existence until 1840. The mark was the initials X. A. and a crown.

PINAX. A Greek vessel corresponding to our plates.

PINK LUSTER. In 1814 Peter Warburton, of the New Hall Works, Shelton, took out a patent for "decorating china, etc., with metals fluxed with lead," which invention leaves the metals, after being burned, in their metallic state.

PINXTON. A china works was established here in 1795 by Mr. John Coke. Billingsley had probably much to do with making the body, which was of very fine quality, although ostensibly engaged as a flower painter. (See Billingsley.) He left there in 1800 for Worcester, after which the Pinxton porcelain considerably deteriorated, the body being coarse and less translucent, the decorations cruder in color and not so carefully drawn. Instead of flowers, landscapes, festoons and sprigs, etc., formed the chief decoration of the more important pieces. The ice-pail illustrated is believed to have been painted by Billingsley. The body is ground-laid in a deep primrose yellow with scrolls of painted gray, and is altogether a very fine piece. The Pinxton mark was a coursive P in red. The works were closed in 1812. M 175.

PINXTON ICE-PAIL.

PIONEER POTTERY. (See Wellsville Pioneer Pottery Company.)

PIROTA CASA. (See Faenza.)

PIRKENHAMMER, near Carlsbad. Founded in 1802 and purchased by Fischer in 1818. The present firm is Fischer & Meig. Some very beautiful specimens of china in finely painted and well modeled vases are issued from this factory. M 176.

PISA, Italy. This city, that in the sixteenth century was the most important center for the exportation to Spain of Italian faïences, in exchange for which were received pottery of metallic lusters, also possessed manufactories whose products are easily confounded with those of Urbino. It should, however, be noticed that the faïences of Pisa have a solid look, not being covered by *marza-*

cotto, which gives to Italian majolicas the appearance of a glazed painting.

PITCAIRNS, Limited, Tunstall. Established in 1894. Manufacturers of earthenware, whose efforts have been successfully directed toward the employment of artistic designs on moderate-priced wares. The works were closed in 1899. M 177.

PITHOS. The Greek name for a large earthenware vessel used for the preservation of food. They were unglazed, and of the shape of a gourd, with a large mouth and flattened base. Rabelais was of the opinion that the tub of Diogenes was nothing more than a pithos, a view shared by the eminent Brongniart. In Winckelmann's "Monumenti Antichi" is an engraving taken from a bas-relief discovered in the Villa Albani, in which the cynic's tub is clearly of earthenware, having a large fracture on one side, which has been repaired with some other material.

PLACE, FRANCIS, conducted experiments in pottery at the Manor House, York, about 1665, and produced a body resembling that of Dwight's. But one solitary authenticated specimen is known, and this was in the possession of Horace Walpole, who valued it highly. Ralph Thoresby, writing in 1714, speaks of these experiments, and says Mr. Place presented him with a specimen, and "with one of the outer covers purposely made to preserve them from the violence of the fire in baking." Mr. Marryatt alludes to this as the first mention of "saggers," but they are spoken of by Piccolpassi, who wrote in 1548. Thoresby further says that "one Clifton," taking a hint from Place's success, afterward made a fortune by it.

PLANCHE, ANDREW. Described as a china maker of Derby, and by some writers credited with having had a large share in the founding of the Derby China Works. The evidence is very slender, and we think may be dismissed as untrustworthy.

PLASTER MOLDS were introduced in England by Ralph Daniel in 1750. They were in use in Italy in the sixteenth century.

PLUMBIFEROUS. A glaze containing lead is so called. It was known in Babylon, and spread through Greece to Italy. It melts at a low temperature.

PODMORE, WALKER & Co., Swan Bank Works, Tunstall. They succeeded Ralph Hall, and were succeeded in 1862 by Beech & Hancock. They also carried on the Unicorn Pottery, and were succeeded by Wedgwood & Co., the present occupants. They made printed earthenware.

POINTONS, Shelton. China manufacturers making both useful and ornamental goods. M 178.

POIREL, NICHOLAS. Sieur de Grandval obtained a patent for making faïence in 1646, but immediately transferred it to Edme Poterat, already established in the business at Saint-Sever. To Poterat (whose son Louis rendered such service to French industry) is probably due the credit of having introduced at Rouen the manufacture of faïence.

POITEVIN. An artist employed by Haviland & Co., Limoges.

PLYMOUTH. The Plymouth Porcelain Works were founded by William Cookworthy, a chemist of that city, who was a man of good education and keen powers of observation. His attention

had been directed to the subject of china clay by an American Quaker in 1745, and in the year 1755 he discovered and recognized both the infusible clay and the fusible felspathic stone at Tregonning Hill, and afterward at Breage and Boconnoe. In 1768 a patent was granted to him for the manufacture of china, and he probably commenced business that year at Coxside, Plymouth. Pecuniary aid was furnished by Thomas Pitt, afterward Lord Camelford, on whose estate at Boconnoe the materials had been discovered. The artistic aid of a French painter, one Sequoi, or Soqui, was secured. The Plymouth Works do not appear to have been carried on for more than three years when they were, for some unknown reason, removed to Bristol, and in 1773 the patent was transferred to Richard Champion. Mr. Hugh Owen explains this by concluding that Champion

worked the patent at first under a license from Cookworthy, probably as early as 1768, and that it was not until some time in 1770 that the Plymouth Works were abandoned and transferred to Bristol in their entirety, the interest of Champion becoming complete in 1773. If this is so, the production of the Plymouth factory must have been less considerable than is generally supposed. However that may be, it is noticeable as the first manufactory in England to produce hard porcelain. The usual difficulties in manufacturing were encountered, especially in the splitting of the ware, and though the early productions were clumsily made and of bad color, a noticeable improvement is evident in later pieces. Blue was the prevailing color used in the decorations, and Cookworthy is to be credited with the first production in England of a blue made directly from the ore. Many shell groups tastefully arranged and in the form of salt cellars, etc., were produced, as well as busts, single figures, vases, dinner and tea services. But the losses were very large. Cookworthy was growing old, and the business weighed heavily on his shoulders, and was finally disposed of to Champion. Plymouth china is marked with the alchemist's signs for tin, usually in red or blue. It seldom occurs on white ware. Cookworthy died in 1780, aged seventy-six. (See Champion). M 179.

PLYMOUTH SALT CELLAR AND MARKS.

Poiters (Vienna). A manufactory of faïence was established in the suburbs of this city at Montbernage, about 1776, by Pasquier, who was soon associated with Felix Faulcon, a printer at Poitiers. The only piece that can with certainty be attributed to this unimportant fabrique is a plate at the Sèvres Museum decorated in rather slatey blue and bearing in the center a cartouche on which is printed a falcon—the mark of the printing house of Faulcon. It is signed on the back F. F. A statuette in pipe clay, representing a monk at prayer, is signed: A. Morreine, Poitiers, 1752.

Pontaille, Burgundy. This town, near to Dijon, was the site of one of the early French potteries, probably contemporary with Beauvais.

Pompadour, Madame de. The success of the Vincennes factory

was largely due to Madame de Pompadour's influence with the king and to the interest she took in it. With the king, she paid regular visits to the manufactory, and was a zealous patron, her example being imitated by the whole of the court.

PONT-AUX-CHOUX (manufactory of the), Paris. This manufactory, which rapidly assumed importance, and which was known under the name of "Royal Manufactory of English Clays," was founded in 1740, near the Pont-aux-Choux, at the angle of the street St. Sebastien. Fine faïences were made here of a yellowish tone, imitating the English queensware. They were mentioned in 1772 in the *Merchant's Almanac,* under the name "Royal Manufactory of French Clays in Imitation of those of England." These faïences were of elegant form and remarkable execution, and continued in demand for a long time. Several sculptors of ability, among others Sigisbert Adam, of Nancy, worked for the Pont-aux-Choux manufactory, that was at first directed by Edme, who was related to several families of Nevers, and finally a Mr. Mignon, who gave it considerable importance. M 180.

PONT DE VAUX, France. Leonard Racle, who was Voltaire's architect, founded works here which produced some very large pieces. Gilded white faïence was also a specialty.

POPOFF, A. A potter of Moscow. His ware was marked with his name in full.

PORCELAIN. The French word *porcelaine* is derived from the shell called in French *porcelaine* (*Cypræa porcellana, a pectinibranchiate gasteropod mollusk*) which was used for making objects of art. "This expression (*faits de pourcelaine*)," says M. de Laborde, in his learned "Glossaire" (Vol. II. of the "Notice des Emaux du Louvre"), "with the exception of a few insignificant modified forms, remained unchanged until the sixteenth century. It then assumed a double meaning; and, while retaining its old signification, was extended to imported vases and utensils of foreign origin having the same pearly whiteness (*nacree*), namely, to the glazed pottery of China, which thus took a name warranted only by the similarity of tint and texture. It thus appears that *porcelaine* (pottery), a word not derived from any Oriental language, was named from the medieval *porcelain,* which was a kind of mother-of-pearl. This *nacreous porcelain* was thus named after the *porcelain shell.*" The opinion of Pauciroli on the composition of porcellana, which was supposed to be made of *"the shells of marine locusts,"* corroborates this etymology."—*French Pottery, by Gasnault and Garnier.*

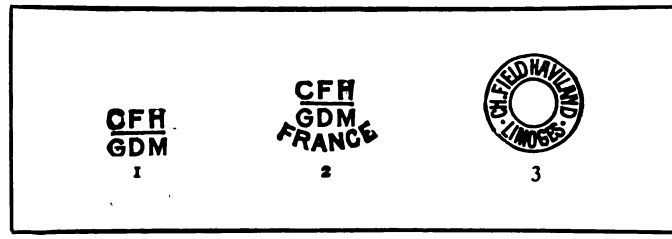
PORCELAIN, HARD. Hard or natural porcelain is made of kaolin only.

PORCELAIN-SEMI. Earthenware of a finer grade and less weight than white granite is so called.

PORCELAIN, SOFT. (See Artificial Porcelain.)

PORCELAINE DE FRANCE. The original name by which soft porcelain or *pâte tendre* was known in France.

PORCELAINES G. D. A. The Alluauds, well-known citizens of Limoges, founded this manufactory of china in 1797; both father and son having filled the office of mayor on several occasions. Some specimens made by them in 1815 have recently come to light and are interesting as showing their acquaintance, at this early date, with underglaze or "furnace fire" color. The factory (known as the "Casseaux") continued under the control of the Alluauds until 1876, when Mr. Charles Field Haviland succeeded—his wife being a grand-daughter of M. Alluaud. Prior to 1868 the mark had been A E stamped in the clay. From 1868 to 1872 it was the mark **C F H** also impressed; the same initials being used as a printed



mark up to 1882. Mr. Haviland retired from active business in 1881, and was succeeded by E. Gérard, Dufraisseix & Morel, afterward changed to E. Gérard, Dufraisseix & Cie., and who were represented in the United States by Gérard, Dufraisseix & Abbot. When this change in the proprietorship occurred, the initials G D M were added the mark C F H (1), the word France being added in 1891. The decoration mark 3 has always been used up to 1898. On January 4, 1901, the two firms, E. Gérard, Dufraisseix & Co., of Limoges, and Dufraisseix & Abbot, of New York, were consolidated and the entire business incorporated as a *société anonyme* under the corporate title of Porcelaines G. D. A., the stockholders being only the former partners in the two concerns, without any additional

members. The entire business, both at Limoges and New York, was put in the hands of three directors, Emile Gérard, Jules Dufraisseix and Frank P. Abbot. Early in the summer of 1901, Mr. Dufraisseix died, and the direction of the business was continued with the two surviving directors, Emile Gérard and Frank P. Abbott. When M. Gérard assumed the management in 1881 the reputation he had already acquired at Limoges was fully sustained by the advances made, not only in the quantity of goods produced, but in many improvements both in the body and decora-

WORLD'S FAIR EXHIBIT.

tion. The already large production was increased to such an extent that in 1892 it was found necessary to entirely remodel and enlarge the works, its producing capacity being increased nearly fifty per cent. Their exhibit at the World's Fair and at Paris was an evidence of the progress made, including as it did many of the examples of *feu de four,* which necessitate the employment of colors requiring the same degree of heat as the body itself, by which means the closest possible affinity is secured. Hitherto such results had been but imperfectly realized; the colors had been somber in tone, and the

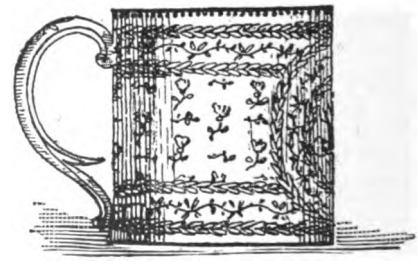
process an expensive one. We may therefore feel justified in regarding the employment of bright colors, which Messrs. Porcelaines G. D. A. have successfully produced, suitable for the decoration of tableware, which necessarily demand such, as a distinct advance in ceramics. The result is a beautiful softness, the color so assimilated with the glaze as to render it impossible to separate them. It is this affinity of color, body and glaze that constitutes the charm of Sèvres *pâte tendre*. At the beginning of 1898 a change was made in the trademark of the firm, for, inspired by absolute faith in the intrinsic and artistic merits of their goods, they put aside all aid or benefit from past marks and reputation, standing only on the merits of their wares, and adopted the following as their marks—the first on white ware, the second on decorated. Courage is an attribute every one admires, and Porcelaines G. D. A. must be credited with a high confidence in their wares. A glance at their latest productions proves this to be well founded, and the new marks have made for themselves an enviable reputation for choiceness of design, quality and selection.

ON WHITE WARE

GDA
FRANCE

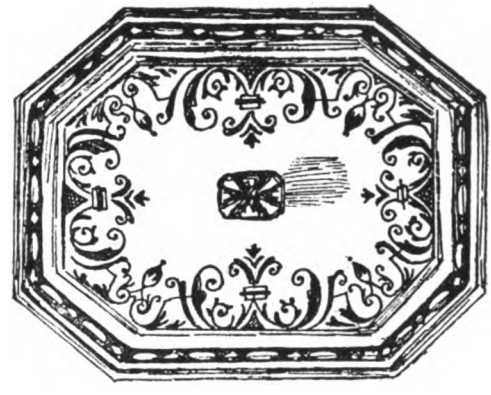
ON DECORATED

PORCELAINE À LA REINE, manufactory of. Situated on the Rue Thiroux, Paris. Founded in 1778 by André Marie Lebœuf, and produced porcelain equal to that of Clignancourt. Many styles of decoration were produced, one of the simplest and most charming being that known as "*decor à barbeaux*," which consisted of delicately painted cornflowers. It was patronized by Marie Antoinette, and the ware was marked with her initials, generally surmounted by a crown. Early in this century the manufactory was in the hands of Guy & Housel (*q. v.*).



POTERAT, LOUIS, Sieur de St. Etienne. About 1673 he applied for and obtained the privilege of establishing at St. Sever, a suburb of Rouen, a manufactory where he intended to make "true Chinese porcelain, of which he had found the secret, as well as that of the Dutch faïence," and some authentic specimens made by him are in

existence. One of these is in the Sèvres Museum, and of which we give an illustration. The decoration is in blue. Poterat did not continue its manufacture. Possibly it was not remunerative, or he elected to devote his attention entirely to the beautiful faïence which has placed Rouen in the position she occupied in the ceramic art of France. Contemporary literature makes mention of this production of porcelain at Rouen, and the name of Louis Poterat deserves to be embalzoned with those of Bottger, Palissy and Wedgwood. As a manufacturer of faïence Poterat achieved an enviable reputation, as will be seen by a reference to the article on Rouen.



PORTLAND VASE. This specimen of Greek art was found in a marble sarcophagus inside a sepulchral chamber under the Monte del Grano, about two and a half miles from Rome. It was deposited there A. D. 235; and the vase is supposed to be the urn that contained the ashes of the Roman Emperor Alexander Severus and his mother. It was unearthed by Pope Barberini (Urban VIII.), and it was for more than two centuries the principal ornament of the Barberini Palace. The material is glass in two strata, the ground a rich transparent dark amethyst color with snowy figures in bas-relief of truly exquisite workmanship, representing Peleus and Thetis on Mount Pelion. In 1786 it was purchased by the Duke of Portland for 1,029 guineas (about $5,350), who loaned it to Wedgwood, and from which in 1790 he produced the celebrated fifty copies. In 1810 it was placed in the British Museum. February 7, 1845, a visitor to the Museum, named William Lloyd, in what appears to have been a mere bid for evanescent notoriety, literally smashed the vase to pieces. He was arrested, and when brought to trial for wilful damage it was found that the Act made no provision for damage done to property over the value of five pounds; so the magistrate was driven to the evasion of directing Lloyd to pay five pounds—the nominal value of the glass case under which the vase stood. As, however, Lloyd only possessed ninepence, he was sent to Tothill Field's prison. A week later an anonymous donor

paid his fine, and he was liberated. The fragments were carefully gathered together, and were joined together by John Doubleday. A picture of these fragments was made in water colors, and it now hangs in a corner of the room where the restored vase rests.

PORTLAND VASE.

PORTOBELLO. In 1729 Astbury created the Portobello ware to commemorate the achievement of Admiral Vernon. On teapots and other pieces figures of the hero, his ships, and unconventional views of the fortifications were stamped in white on the red ware.

POSSET POT. Posset is a mixture of hot ale, milk, sugar, spices and small dice of bread or oatcake, and was a favorite beverage at Christmas and other feasts, and was served in a posset cup, each one taking a spoonful in turn. Sometimes the wedding ring of the hostess or a small silver coin was dropped in, and he or she who was fortunate to fish it up was considered certain of good luck. These posset cups were made early in the 18th century, and

FIG. 1.

FIG. 2.

to some extent superseded the many-handled tyg. They were made in a variety of materials. Fig. 1 is in a brown ware, and bears the date 1711, which, with the inscription, "God Save the Queen!" is executed in slip. Fig. 2 is similar in character, and bears the name "Richard Meir." This is in the Liverpool Museum. Others were made in combed ware (*q. v.*) and a combination of marbling and slip painting.

PORTUGAL. Although to the Portuguese, as traders, we are

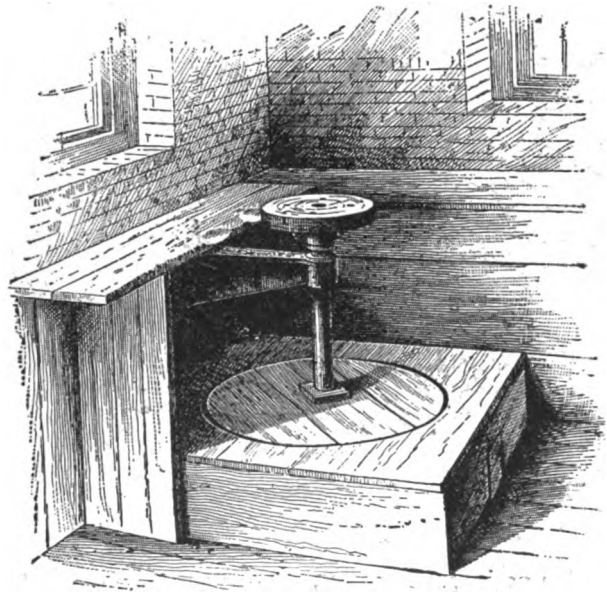
indebted for the early importation of Oriental china, but little is known of her ceramic history. We know there were potteries in the Middle Ages for the manufacture of "Noble Buccaros," among them one Della Maya, of Lisbon, and others at Montemore, Olivenza and Sadoval, which produced scented potteries in imitation of that of Central America. Vista Allegre had a china manufactory in 1790. At present there is a factory at Calder producing good imitations of Palissy ware. The works of the late Baron Howarth, Lopes & Co. and Sequeera & Co. are present-day manufacturers.

POTERAT, EDME. (See Poirel.)

POTTER, CHARLES. (See Prince de Galles.)

POTTER. Marryatt states that the Chantilly factory was in full activity in 1803 under Potter, producing hard porcelain and *terre de pipe* in imitation of English. The production in plates alone was three hundred dozen a day.

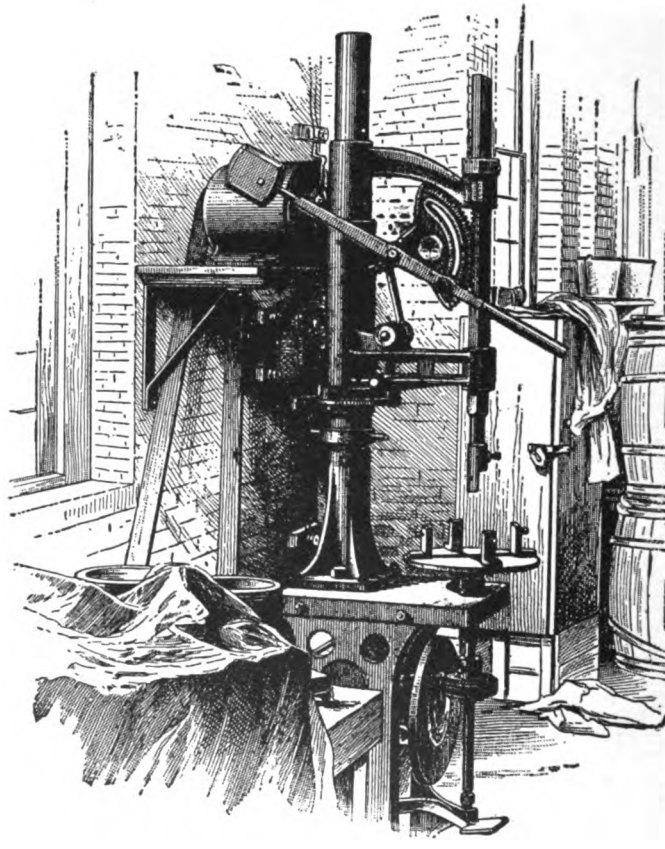
POTTER'S WHEEL. The antiquity of the potter's wheel is almost as great as that of pottery itself. It was known to the Egyptians



FOOT WHEEL.

more than four thousand years ago. (See illustration to Egypt.) The prehistoric vases of Greece were made upon it. It was probably of Chinese origin. From there it passed into Egypt by Scythia and

Bactria—through Scythia or Egypt itself to the Arabs of the Arabian Peninsula and of Africa. From the same source it was introduced into Greece, and its colonies in Southern Italy, reaching Etruria at a later date. It then penetrated the whole of southern Europe, Rome and its colonies, Spain, etc., stopping at the southern part of Germany, and while penetrating into Gaul, it remained unknown among the



JIGGER.

Scandinavian nations. At first it was merely a revolving horizontal disk turned by hand; then a driving wheel below was added, which was turned by the potter's foot, which in turn gave place to a foot board, same as that to a lathe. Afterward the driving wheel was separated from the disk, which it turned by means of a strap or rope, and was worked by an assistant, who was later superseded by

steam. The potter's wheel is now almost a thing of the past, and a beautiful art is nearly extinct. Its place has been taken by a mechanical device called a "jolly" or "jigger," and much has been gained in economy of production if something has been lost in the poetry and charm that invested the rhythmical motion of the potter and the extinction of a craftsmanship to which the world owes many of the best and most graceful forms ever produced. The jigger can reproduce many of the pieces formed by the thrower, but it cannot create; that was the function of the thrower and his wheel.

POTTERY. Any receptacle or vessel made of clay. The word is derived from the Latin *potum,* a drinking vessel, from which also comes the French word *poterie,* which applies to all vessels, including those made of porcelain. China is as much pottery as earthenware is, and earthenware as stoneware. These, broadly, are the three great divisions of pottery.

POTTERS' CO-OPERATIVE COMPANY, East Liverpool, Ohio. This pottery is quite as well known as the Dresden Pottery, the name given to the works. It was established in 1876 by Brunt, Bloor, Martin & Co., who were awarded a diploma at the Philadelphia Exhibition. The works were incorporated under their present form in 1882. Mr. H. A. McNichol is the president and treasurer, and Mr. H. A. Keffer the secretary. The goods made are of excellent quality and the decorations tasty in design and coloring, quiet and subdued effects being principally attempted. Their greatest successes have been in semi-porcelain dinner and toilet ware. M 181.

POTTERIES, THE STAFFORDSHIRE. The group of towns consisting of Hanley, Shelton, Cobridge, Etruria, Burslem, Tunstall, Longton and Stoke-upon-Trent, situated in the northern part of the County of Stafford, are known collectively as "The Potteries," or "The Staffordshire Potteries." These towns cover a space of about nine miles long and three broad, and have a combined population of about 250,000, of which fully 100,000 are employed in the potteries. The output of pottery of all kinds manufactured in the district is computed to be about 1,560,000 crates annually, of an aggregate value of sixty to sixty-five million dollars. The variety of goods made ranges from the very cheapest to those dainty little trifles on which craftsman and artist have lavished many hours of patient work and all the skill resulting from long years of study and practice. The potting trade has been centered there for ages, quite how long it is difficult to say, the business being handed down from one generation to another, the same name occurring in successive periods with almost mechanical regularity. Wedgwood, Malkin, Wood,

Twyford, Astbury, were potters in the seventeenth century as their namesakes are to-day. In many cases direct descent can be traced. In Wedgwood's time, Burslem, called "The Mother of the Potteries," was the principal town, almost the only one, the old town of Newcastle being the nearest market. There were no roads worthy of the name, and the lanes that led out of Burslem were infested with highwaymen. Sixty years ago the potter found rough amusement in dog-fighting and bull-baiting, and if he is less rough to-day his keen enjoyment of sport still manifests itself. "The Potteries" is hardly a name to conjure up memories of verdant meadows and shady woods, of brooks of limpid depth, of crag and tor and wild moorland; yet all are within easy reach, many of them within sight, and the potter, turning from the mire of clay and roads black as Erebus from the passage of innumerable coal carts, seeks out these sylvan spots in his brief breathing spells, and returns to his work the better for his communion and study with the master craftsman. The Wedgwood Institute, the Stoke School of Art, the Hanley Mechanics' Institute, have all done much for the potters' art in the Potteries, but the woods of Trentham, the dales of the Dove, and the Leek moors have done more. In the small manufactories usually one class of goods only is made, sometimes one article only—jugs, for example—but the large firms make an almost bewildering array of pottery. Where there is so much variety it is a matter of astonishment that the same standard of excellence can be preserved throughout. Here, for instance, is a list of the products of one single house: (1) Wall tiles, plain and decorated; (2) majolica wall tiles; (3) tesseræ for domes, etc.; (4) china; (5) Parian; (6) earthenware; (7) ornamental majolica; (8) stoneware; (9) terra-cotta. These large houses are scattered throughout the Potteries, so it is difficult to make any division; but, speaking generally, fine china comes from Stoke, the cheaper grade from Longton, whilst Hanley, Burslem and Tunstall furnish mostly earthenware for domestic purposes.

Potts, C., & Son, were potters at Norwich, Ct., in 1796.

Portland Stoneware Company, Portland, Me. This salt-glaze stoneware factory was established in 1846. A few years ago they made a number of reproductions of antique pottery from models furnished by various museums which were highly spoken of, but the manufacture of which has been discontinued. The production is now limited to drain pipes, etc., and terra-cotta garden vases. The proprietors are Messrs. Winslow & Co.

Pottery Tree. This is one of the curiosities of Brazil. The stem does not exceed a foot in diameter, and it grows to a height of

100 feet. The wood and bark contain so much silica that they are used by potters in the production of earthenware vessels. The bark contains more silica than the wood. It is first burned, and the residuum is pulverized and mixed with clay in about equal quantities, and produces a good earthenware.

POULAINE, DUPRE. Pottery with Chinese subjects, birds, flowers, etc., was made by him at Desvres, France, about 1780.

POULISSE, PIETER, potter of Delft in 1690. At first associated with Adriaen Pynacker, and later established on his own account. He produced some fine work with black background and others with polychrome decoration—chiefly red and yellow—among them a superb octagonal plateau in the Loudon collection.

POUYAT, J., Limoges (La Société Céramique). The Pouyat family have long been identified with the city of Limoges, and its citizens have freely conferred upon them the highest honors within their gifts. Pierre Pouyat, who was consul in 1743, established in 1760 a faïence manufactory at St. Yrieix, and specimens are still occasionally met with in the Department Haute-Vienne marked with a capital P. This factory was in full operation at the time of the discovery of kaolin at St. Yrieix, and Pouyat, at once recognizing the value of the discovery, bought a bed of the finest quality. Paris was then the best market for china, and there were established there four or five factories, the principal one of which, La Courtille, near Fontaine du Roi, Mr. Pouyat purchased. Hard porcelain was already produced here, but under German influence and dominated by German tastes, the factory was, in fact, often called "Manufacture de porcelaine Allemande." (See Locre.) It was one of the largest, if not the largest, of the then five Paris works, and its productions must have been remarkable in character, as we find that among the papers of Madame Du Barry a receipt for 3,000,000 livres—about $15,000—for a life-size porcelain bust. Locre, the original proprietor, in

1784 entered into partnership with Russingen, and he eventually controlled the business. When Mr. Pouyat bought the factory he made many radical changes, the German character of the productions giving place to more distinctively French characteristics, and using the Limoges kaolin in its manufacture. Success attended his efforts, and several of the decorations attained a success which has extended to the present day. Specimens of the old "Barbeau" pattern of La Courtille are eagerly sought for, and are known as "Old Pouyat." This pattern was made about the same period at the *Manufacture Porcelaine a la Reine,* but it is claimed that it was made first at La Courtille. At La Courtille they were the first to employ *grand feu* colors—not only blue, but also a brown known as *écaille,* and a violet. The *coulage,* or casting process, was known and practiced as early as 1791, while it was not adopted by Sèvres until 1814. For his services to French ceramic art Mr. François Pouyat received in 1830 the cross of the Legion of Honor. He died in 1838, aged eighty-six years. His son, J. Pouyat, who had been his partner and active collaborateur, succeeded him. He founded in Limoges, in 1842, a factory which soon assumed considerable importance, gathering around him the best workers then to be found, and aiming at and effecting a high standard of excellence in the goods manufactured. In addition to some excellent shapes in dinner ware, some trials of monumental decorations are also to be noted, as, for example, a series of Corinthian capitals for the church of St. Pierre du Queyroix, two specimens of which are in the Limoges Museum. He was succeeded by his sons Émile, Louis and Eugène. To such extensions had the business grown that it became necessary to build a new factory to keep pace with the demands, and this was accordingly done in 1849, when the St. Leonard's works were erected. The Pouyat china is remarkable for its fine texture, and such confidence had the firm in its excellence that at the Paris Exposition of 1855, and again in London in 1862, they had the courage to make a specialty of their white ware without calling in the decorator's aid, content in the assurance that it would best indicate that for which they had always striven, viz., purity of body and glaze, and artistic excellence in design. A dinner service in plain white china, modeled by M. Comsdera, excited at the time considerable interest from the remarkable purity of its lines and excellence of body. Nor was this confidence misplaced, as in each case the highest possible award was bestowed upon them. Especial attention was attracted by the thinness and lightness of the cups, which won for them the name of *tasses mousseline,* and which has since become a generic name for

POUYAT CHINA.

extremely thin cups. It was for these same qualities that the first prize was awarded them at the Paris Exhibition of 1878; and M. Dubreuil, son-in-law of Mr. Louis Pouyat, and manager of the factory, was created a Chevalier of the Legion of Honor. In 1890 Mr. Emile Pouyat, who, in spite of his great age had always participated in the active conduct of the works, entrusted the management to his grandson, Baron de la Bastide, and Mr. G. Dubreuil, grandson of Mr. Louis Pouyat. While paying special attention to their white ware, many beautiful decorations come from the Pouyat factory, one specialty being under-glaze (*grand feu*) Sèvres blue, which the chemist from the Sèvres factory attributes to the quality of the clay,

THE LOST SLIPPER.

which is peculiarly adapted to the assimilation of cobalt. Mr. Charles Laurent is the manager of the painting department, and his facile pencil enriches many of the ornamental pieces with finely conceived and delicately executed flower and figure subjects. M. Beylac, a skilful modeler, is responsible for many of the very good shapes produced. The firm fully upheld their reputation at the Chicago Exhibition. We give an illustration of a white china center piece, representing the four seasons, presented by the firm to the New York Metropolitan Museum of Art. The base is 40 x 36 inches and the height 36 inches. It is a good example of Pouyat china and an excellent specimen of modeling. Only four of these were made.

One is in the Sèvres Museum, another in the one at Limoges, and the third one is at the factory. We also illustrate a recent plaque executed by the firm, of which they make a large variety. Specially worthy of mention are those painted in a rich underglaze blue, with female heads of great loveliness.

PRATT, F. & R., Fenton, Staffordshire. Manufacturers of earthenware. This is an old-established house, there having been a continuous line of potters of this name since the end of the last century. M 182.

PRE-D'AUGE (Calvados, near Lisieux) and several places in the neighborhood were for a long time renowned for their enameled tiles, characterized by a design traced with a point in the wet clay, and this manufacture was of such importance that up to the end of the eighteenth century enameled tiles were generally designated under the name of *paves de Lisieux*. About the middle of the seventeenth century a workman of Rouen, called Joachim, established this fabrique in the village of Bauqueterie on the common of Pre-d'Auge and of Boissiere, whose products for a long time bore the name of "Joachim paving-stones." According to the accounts of the King's Buildings for the year 1670, the vases and tiles that decorated the *Trianon de Porcelaine* were furnished by the fabrique of Pre-d'Auge.

PRESTINO, or Perestino, Maestro, the successor of Maestro Giorgio. "His works are interesting," writes Mr. Robinson, "as exhibiting a return to the style of the early Gothic masters of the sixteenth century, the iridescent luster being identical with that of the well-known painters of the bacali amatoria pieces. It is possible that Maestro Prestino's fabrique produced the coarse late specimens, enriched with the yellow luster, frequently occurring, and evidently dating far into the fifteenth century. He is, at any rate, the most recent master hitherto identified using the luster colors."

PRINCE DE GALLES, Manufacture de, Paris. Established in 1790 by an Englishman named Charles Potter. He was the first to make English earthenware in Paris, introducing transfer printing. On account of political events, manufacturing was for a time suspended.

PRINTING ON POTTERY. The origin of this is much disputed, it being claimed respectively by Sadler & Green, of Liverpool, by Holdship, of Worcester, and R. Hancock, of the same place. (See Hancock.) The evidence is strongest in favor of Sadler & Green, as Hancock did not go to Worcester until 1756, though it must be remembered that he came from the Battersea Enamel Works, where

it was undoubtedly first used on enameled objects. In Moss s Liverpool *Guide*, published in 1790, it is stated: "Copper plate printing upon china and earthenware originated here in 1752, and remained some time a secret with Sadler & Green." Professor Church gives 1750 as the date. John Sadler was the son of Adam Sadler, a favorite soldier of the Duke of Marlborough. He commenced business in 1748 at Liverpool as an engraver. He was in the habit of giving spoiled impressions of his plates to children, who stuck them on broken pieces of earthenware, which led him to experiment, and with the aid of Guy Green, a poor boy he took into his service, eventually perfected the process. In 1756 they made a deposition that they had on the 27th of July printed in six hours 1,200 earthenware tiles of different patterns, and this was confirmed by Alderman Thos. Shaw and Samuel Gilbody, "clay potters," who fired the tiles for them. Such an economy in decoration made a great stir in the pottery trade, and Staffordshire manufacturers hastened to send their wares to be printed. M. Brongniart says the process was in use at Marieburg in 1760. If this is correct it was probably an independent invention, as the art spread slowly, and was not even known in France until 1775, and in Germany until about 1809. For process of printing see Manufacture of Pottery.

Prochoos. Greek pitchers either with or without handles, used both for wine and water. They correspond to our ewers.

Prunus Patterns. The embossed mayflower of Bow was so called.

Psykter. Greek wine cooler. A double-walled vessel of the amphora style.

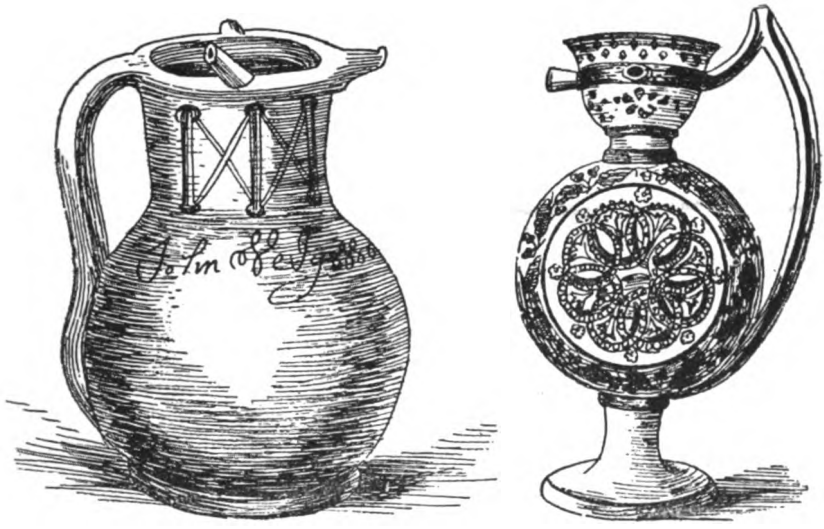
Pulinex, Henri, had a faïence factory at Bruges in 1751. M 183.

Pull, Paris, in 1855 made excellent reproductions of Palissy ware.

Puzzle Jugs. These wager or puzzle jugs were once great favorites at the village inns, and were made up to the beginning of the present century. A perforated neck usually prevented the abstraction of the contents in the usual way. The liquor passes up the hollow handle, and through one particular spout or nozzle, all the other openings having been closed by the fingers. The old Lambeth potteries produced some of these, but their production was not confined to any special locality. The earliest dated piece bearing the name of Wedgwood is a puzzle jug, which we illustrate. It is made of brown ware, and is dated 1691. They are frequently found in salt glazed ware, one of which bears the inscription:

"From Mother Earth I claim my birth;
I'm made a joke for man,
But now I'm here, filled with good cheer,
Come, taste me if you can!"

The Leeds pottery produced some very good ones, generally without decoration. Of one of these we give an illustration.



PYNACKER, ADRIAAN, master potter at Delft in 1690. Pupil and son-in-law of the celebrated Aelbrecht de Keiser, he was at first associated with his brother-in-law, Cornelius de Keiser (*q. v.*), and later associated with Pieter Poulisse. His faïences, copied from Japanese porcelain, are extremely remarkable, both in manufacture and decoration.

PYNACKER, JACOBUS, master potter at Delft in 1672 at the sign of the Three Porcelain Bottles; he was later associated with his brother-in-law, Cornelis de Keiser, and produced with him pieces of fine execution with rich decorations in blue, red and gold.

Q

QUAIL AND WHEATSHEAF PATTERN. Originally made at Bow.

Quail and Wheatsheaf.

It was also produced at Worcester, Bristol and Bow. It was a copy or adaptation from a Japanese pattern.

QUEENSWARE. A cream-colored earthenware made by Wedgwood, and so called in honor of Queen Charlotte, who accepted a service of it. The name is used in various parts as synonymous with earthenware or crockery.

QUIMPER, Finistère. A faïence manufactory was founded in this city, in the suburbs of Loc-Maria, about 1690, but it was only after 1743, under the intelligent direction of Pierry Caussy, son of a master potter of Rouen, that this manufactory, which at this time grew rapidly, produced faïence worthy of notice. At first the decorations were only a servile copy and imitation of Chinese, but soon Caussy endeavored to show his originality and produced some rare work. Unfortunately he was never able to improve the paste very greatly, because the requisite materials could only be obtained at enormous price, and consequently the body always remained thick and heavy, and covered by a brown enamel, under which the design was drawn in violet of manganese in strong lines. The faïences of this period were marked P. C., or more frequently C. (Caussy). In 1809 the manufactory of Loc-Maria became the property of the fam-

ily of La Hubaudiere, who abandoned the manufacture of faïence for that of glazed pottery. A few years later quite fine earthenware was made by them, marked with an H inscribed in a triangle and surmounted by a fleur-de-lis. About 1872 the director of the manufactory, M. Fougeray, having found a considerable number of designs and tracings left by Caussy, together with a manuscript volume in which were noted in detail the composition of the pastes, colors and enamels, used these documents to revive in all its integrity the ancient manufacture, which he did to such perfection that many of his faïences, scaled and aged by unconscientious merchants, could easily deceive the best trained eyes and pass in the trade for pieces dating in the last century. We must hasten to add that the manufacturer himself remained in ignorance of the fraud, and upon discovering it, with a commercial loyalty which we are glad to note, marked all of his products H. B., the initial letters of the firm (La Hubaudiere et Cie.).

QUIRING, ALDERSZ KLEIJNOVEN, master potter at Delft in 1655, to whom we owe, according to M. Havard, the beautiful imitations of Japanese enriched with magnificent red. In 1680 he registered as the mark of his fabrique his monogram, which up to the present has never been found on a single piece.

R

RAEREN, parish of the ancient duchy of Linburg (Rhenish Prussia), possessed from the beginning of the sixteenth century manufactories of earthenware of yellowish body covered with glaze of a more or less dark brown, resembling those of Frechen. Those of Raeren are oftenest in spherical form, divided in two parts by a large cylindrical band or horizontal circular frieze on which are represented in relief scenes taken from the old or new Testament, the chase, dances, processions, armorial bearings, etc. The neck is ornamented with medallions, also in relief, the shoulder and base with engine-turned work, geometric ornaments, etc. "While the brown color predominates," says Mr. Schmitz, "the potters of Raeren have nevertheless made equal use of a blue of unequaled brilliancy; it is a tradition in the families of Mennicken and Emonts (or Emens) that this last color, designated as Leipzig blue, was preserved as a professional secret and that the members of the guild were pledged not to divulge it outside." It was at Raeren that were produced the

well-known peasant dance and Susanna jugs, the latter taken from the story of Susanna and the Elders, and often bearing inscriptions in German or Flemish of questionable taste.

RAMSEY, DAVID. A patent was issued to him in 1636 for "the making of stone jugs, bottelles, and which are now made by strangers in foreign parts."

RAPHAEL WARE. Italian majolica was so-called from the erroneous supposition that some of the finest specimens were painted by him. Such as could, however, be credited to him are not of earlier date than 1540, twenty years after his death. His compositions are found upon a large number of pieces, executed by later artists.

RATISBONNE. A manufactory of common brown earthenware existed here early in the sixteenth century. It was decorated in relief with ornaments and mythological subjects. Some of them of quite careful execution bear the initials of Jerome Hoppfer, the engraver.

RATO, Portugal. Azalejos were made here as early as the fifteenth century. In the eighteenth century the principal Portuguese manufactory was that of Lisbon, known as the Royal Manufactory of Rato, from which emanated faïences of many kinds.

RAUENSTEIN. A china manufactory was established here in 1760.

RAVENNA, Italy. This manufactory is only known by a single cup in the Sèvres Museum, decorated inside in camaieu blue with a painting of perfect execution representing Arion borne on three dolphins and playing a violin. It is marked in full "RAVENA."

RAYOUNANT. A decoration identified with Rouen. The patterns so called are marked by a division of a circular piece into sections by rays of decoration proceeding from the central to the border ornamentation.

REAUMER'S PORCELAIN. In 1739 Reaumer, a celebrated French chemist, produced a substance known under the above title, but it had none of the properties of china, being merely a devitrification of glass.

REDON, M. L., & Co., Limoges. Manufacturers of china.

REFLET MÉTALLIQUE. This beautiful and rich effect seems to have had its origin in Persia, many fragments having been found at Rhages. (See Persia.) It was probably carried into Spain by the Saracens and from there into Italy, where the secret of the composition and manipulation of the pigments was lost about 1560-70. The Marquis Ginori at Doccia and an able young chemist at Gubbio (where these lusters attained their highest perfection), named Luigi

Carocci, have successfully reproduced them in modern times. The secret of their production has at all times been carefully guarded, so that the recent successes attained by Keller & Guerin, of Luneville, Zsolnay and Clement Massier may be looked upon as an independent discovery. These pieces are, however, to a large extent the result of uncontrolled forces. It is impossible to duplicate them, some particular action of the fire giving the most magnificent iridescence to a certain piece, whilst probably the next piece to it and treated with exactly the same pigments is totally valueless. Piccolpassi describes the kiln and the *modus operandi* of the Italians, who also had their difficulties, as frequently not more than six pieces out of a hundred would have any value. To produce these iridescent lusters the piece is painted with metallic oxides, principally gold, silver and copper, and during the process of firing currents of air are introduced into the kiln, which cause a partial crystallization of the oxides in the pigments, leaving a beautiful metallic deposit of so iridescent a nature that the piece presents innumerable changes of color when viewed at different angles. The ware is unprotected by saggers, and imbedded in charcoal or sawdust. In the little more than three years which have elapsed since this was originally written, the process of production seems to have become generally understood, and a great number of firms now produce them and excel in color and brilliancy the old.

REGNAULT, VICTOR. Successor to M. Ebelman as director of Sèvres. He is credited with the invention of *pâte changeante,* 1852-1870.

REGNIER, M. Director of Sèvres from 1779 to 1793.

REGOUT, PETRUS, & Co., Maastricht. This is an old-established house, one of the largest and most prosperous on the continent of Europe, manufacturing principally decorated earthenware. Their trademark is a sphinx couchant on an oblong bearing their name. M 184.

REHIVEILER, FRANCONIA. The Sèvres Museum possesses two plates from this manufactory, decorated in soft and harmonious tones with sprays of flowers or little floral lambrequins. But little is known of this factory.

REID, W., & Co., were potters at Liverpool, and made blue and white earthenware, commencing business in 1756.

REMMEY, R. C., & SON, Philadelphia. This firm, it is stated, was founded by John Remmey at Potter's Hill, New York, in 1735. The name does not appear in the New York directory for 1786, but in the one for 1798 there is a John Remmey of Potter's Hill, with a

residence at 9 Cross Street, which is in the immediate neighborhood. John Remmey died in 1762 and the stoneware manufactory was carried on by his descendants until, it is said, about 1820, though if so he must have gone to a new location, as Potter's Hill was leveled about 1812. His great-grandson, Joseph Henry Remmey, it is stated, went to South Amboy, and Henry Remmey, about the year 1810, to Philadelphia, and soon afterward embarked in business there, founding the now well known house. We think this is not quite correct, and that Henry Remmey before he went to Philadelphia was in business in Baltimore, though not as early as 1810. There is no mention of any Remmey family in the Baltimore directories from 1807 to 1819, but the one for 1822-3 gives "Henry Remmey, Stoneware Factory, N. W. corner of Bond and Pitt Streets," and his name appears again in the directory for 1824. It is probable that soon after this he went to Philadelphia and established the pottery there. At all events, Henry Remmey, Jr., issued a price list of salt glaze stoneware dated Philadelphia, 1834. The firm make an excellent quality of stoneware and do an extensive business. The manufactory was burned down in 1896, but was immediately rebuilt.

RENARD, M., a skilful modeler employed at the Sèvres factory. He was working there in 1879.

RENAUD, J. M. A modeler in terra-cotta at Valenciennes, end of the last century. His work is very delicate and highly esteemed.

RENGETSU. A nun who made pottery in Kioto in 1867.

RENIER, HEY, or Reyer Hey. A potter of Delft in 1697. He was a decorator of great talent.

RENNES. Manufactories of glazed pottery of some renown were established here as early as the fifteenth and sixteenth centuries, and it also had faïence manufactories at a very early date. Little is known of them, with the exception of funeral plaques, fragments of which are found in the cemeteries of the town and its environs. Jean Forasassi (*q. v.*) in 1748 made figures of the Virgin and the saints, but the first careful period did not last, and, as was the case at Nevers, these were replaced by rude sketches, which perhaps satisfied the earnest faith of the old Bretons. In the Rue Hue there

was a somewhat important works, the director, Bourgouin, being a clever faïence maker. The shapes were adapted from goldsmiths' models and were covered with a white and very pure enamel, but their beauty is somewhat impaired by the indiscriminate use of manganese violet and of a green pigment darkened with black, of which the painters of Rennes seem to have been particularly fond.

REPOVECKI, STEFAN, Znaim. Established 1835. Majolica and stoneware. M 185.

RETICULATED WARE. Invented by the Chinese. It consists of an inner and outer vase, the latter being elaborately perforated, and

covering the inner piece without touching it except at the neck or foot to keep the inner vase in position.

REVEL, Russia. Early in 1700 a faïence manufactory existed here, but little beyond this is known of its history.

REVEREND, CLAUDE. In 1664 Louis XIV. granted letters patent to Claude Reverend, authorizing him to establish a manufactory of earthenware, probably at Paris. Some of his works are imitations of the Dutch style, and others of Oriental porcelain. The illustration gives a good idea of his table pieces, with the stiff figures in the costumes of the time, and the light and elegant frameworks. The material is thin, with a white enamel painted with clear polychrome colors.

REYGENS, AUGESTIJN. Master potter of Delft in 1663. To him we owe the rich polychrome decorations of admirable execution marked in monogram A. R. This mark, without any valid reason, has by some writers been attributed to Claude Reverend.

RHE, or Rhages. A city of Persia whose origin is unknown. It is mentioned in the Book of Tobias and was undoubtedly one of the chief cities of Persia long before the Christian era. It was the site of an extensive manufacture of pottery. (See Persia.)

RHEAD, FREDERICK ALFRED. Born at Newcastle, Staffordshire, in 1856. Mr. Rhead is an artist of great versatility and extremely prolific in ideas. He was originally a pupil of M. Solon at Mintons and afterward went to Wedgwoods, where he executed some important pieces in *pâte-sur-pâte* for their exhibit at Paris in 1878. He then accepted the position of art director at Bodley's, and afterward filled the same office for several years at the Brownfield Pottery, but the cumbrous committee of workingmen who constituted the management failed to understand Mr. Rhead's undoubted artistic instincts, and he accepted a position with Messrs. Wileman & Co., Longton. Here he introduced *L'Art Nouveau* decorations, which under various names had a most gratifying success, a success which caused them to be widely and vilely imitated. When at Brownfields Mr. Rhead executed the Gladstone Testimonial Vase in 1888, which he had the pleasure of presenting to that statesman at Hawarden, and in 1894 he was also called upon to design and execute the Mundella Testimonial Vase. Mr. Rhead is the possessor of about a dozen national medals and Queen's prizes, awarded him for various ceramic productions. A fine specimen of his work is in the Sneyd Church, in the shape of a painted fresco ("The Resurrection") thirty feet high, and Trypstych, "The Crucifixion," "The Annunciation" and "The Adoration of the Magi." We have spoken of Mr. Rhead's versatility, and this is exemplified by his fine illustrations, in conjunction with his brother, Mr. Louis Rhead, of Brooklyn, of "The Pilgrim's Progress" and "Robinson Crusoe." They are now at work on a sumptuous edition of Goethe's "Faust." Mr. Rhead is an indefatigable worker, occupies any number of offices in connection with the art of "The Potteries," and has found time to write two novels on ceramic subjects, a comic opera which has been successfully produced, and a number of fugitive contributions to the leading artistic periodicals of the day.

RHODES, ISLAND OF. The pottery of Rhodes varies little from that of Persia, the principal point of distinction being the employment in Rhodian pottery of a thick red similar to sealing wax. The

annexed illustration is from a dish in the collection of the author. Good reproductions of Rhodian have been made by Boch Frères, of La Louviere.

RHODES, J. S. One of the pioneer potters of Australia. He was a Staffordshire potter, who came to this country in the early '60's, and found employment at East Liverpool. Being of a roving disposition, he stayed there only a few years, and returned to England, eventually drifting to Australia, attracted by the large fields of gold there. Not being able to reach the gold fields, he busied himself in prospecting for clay, and finding a suitable deposit built a miniature pottery on the Ballarat Road, Flemington, a suburb of Melbourne. Kiln builders were unknown, and he had to construct one himself; but his first attempt was not very successful, as to attain the necessary heat the whole kiln became red hot, arousing the angry protests of his neighbors. Here he made Parian, sprigged china and Rockingham ware. In the latter he produced mugs with a frog in the bottom—once so popular in English rural districts; lizards and snakes, going, like Palissy, to nature for his models. He was awarded a prize at the Intercolonial Exhibition of 1867, one of his

best pieces being a large openwork basket formed of long rolls of clay, and ornamented in relief with blossoms of the wattle, waratah and other Australian wild flowers. The handle was composed of a mass of twisted snakes. Though the business was small, it was fairly remunerative, and in the hands of a more energetic man might have assumed considerable proportions; but Rhodes tired of the business and abandoned it in 1874, and went into the enamel brick business.

RHODES, WILLIAM. One of the proprietors of the Jersey City Pottery from 1845 to 1854. In the latter year he went to Vermont, and established an earthenware works there, leaving in 1859 to join with a Mr. Yates in founding the City Pottery at Trenton, N. J. This was the first works in Trenton fitted up for the exclusive manufacture of white granite and cream-colored ware. The original firm was Rhodes & Yates. Mr. Higginson then became a partner, and in 1865 the firm was Yates & Titus, who were succeeded in 1870 by Yates, Bennett & Allen, who gave place in 1875 to the City Pottery Company, of which Mr. Yates and Mr. John Rhodes, a son of William Rhodes, are two of the partners.

RHYTON. A Greek drinking cup, with the base formed of the head of some animal, usually a dog, goat or deer. It is peculiar from the fact that it could not be set down except when empty.

RICHARD, Milan. This large business has been incorporated with that of Ginori. M. Richard has performed a distinguished service to the ceramic art by the grand scale of his manufacture and the quality of the goods produced, which, whilst lacking Italian characteristics, compare favorably with the best makers of England and France.

RICH, W. A potter who made slip-painted dishes, etc., about 1702.

RIDGWAY, JOB. There is not a more familiar or honored name in the potteries than that of Ridgway. For 150 years this family has been continuously engaged in the pottery trade. Job Ridgway was born at Chell, near Hanley, in 1759. When seven years old he lost his mother, and he, his father and an elder brother went to Swansea in search of work at the newly established pottery there. Here he was apprenticed, but not being contented in Swansea returned to the Potteries in 1780. But he failed to find work, and six months later went to Leeds, where he stayed for two years, returning again in 1782 to live with his brother George, who had settled in Hanley. He made the proviso, however, that "they had prayer in the house." The year previously he had, to use the vernacular, "been converted,"

and the deep religious feeling then aroused in him remained through life, and the Methodists of the Potteries have every cause to be grateful to him. He was married in 1784 to Miss Mary Mayer, sister of Elijah Mayer (*q. v.*), and in due course three sons were born to him—John, William and Joseph, the latter dying when only nine months old. Job Ridgway was now prospering in business. His wife had a business of her own, and by their joint labor and thrift the husband soon became a master potter, in partnership with his brother George. When the partnership was amicably dissolved Job built the Cauldon Place Works, where he established a business known for many years as Job Ridgway & Sons. He made earthenware and stoneware, and a few years later blue-printed ware, but the manufactory did not assume any great importance until it came under the management of his sons, John and William, the former being entitled to the greatest credit. About the year 1802 Job Ridgway made a strong effort to revive the old Hull Pottery, but, though his experience and judgment considerably extended the trade of the works, in 1804 he sold his interest to Messrs. Smith, his partners, for £1,000. After this the pottery did not go on successfully, and in 1806 the Smiths assigned all their interests to Job and George Ridgway, who carried them on until 1826. (See Bellevue Pottery, Hull.) Mr. Job Ridgway admitted his two sons, John and William, into partnership, and continued in active management of the Cauldon Works until his death in 1814.

RIDGWAY, JOHN. Son of the above. He was a skilful potter and a man of most energetic character, and to him must be ascribed in a large measure the success of the Cauldon Works. Soon after 1815 he introduced a bone china body, and added to it a rich and luscious glaze, making it capable of receiving the richest colors. Perceiving that there would eventually be a good trade with the United States, he visited this country in 1822, which resulted in a complete commercial success, and his subsequent journeys here only increased the connections formed, and resulted in a large and growing business. The dinner service, "Beauties of America," must have had in itself an immense sale. It was soon after his return from his first visit to America that the partnership between himself and his brother William was dissolved. About this time, too, he introduced some entirely original models of shapes, copies or adaptations from silver services, which, with their gadroon edges, presented a very chaste appearance, and resulted in a large trade. So highly were his productions rated that very soon after the accession of Queen Victoria to the throne he was authorized to describe himself as

"Potter to Her Majesty," and since that time the Cauldon Works have continuously received royal patronage both for Windsor Castle and Osborn. This signal favor was not earned until after a great number of years of patient toil and unremitting labor, and it was conferred for services that were deemed worthy of that honor. In 1851 at London, and in 1855 at Paris, he gained high distinctions, very eulogistic notices appearing at the time respecting his exhibit. Mr. John Ridgway married in early life Miss Elizabeth Saunders, by whom he had one son, who died young. His wife only survived a short time, and he was left a widower for many years. His connection with the Cauldon Works did not cease until 1859, one year before his death, which occurred about 1860. From 1854 to 1857 he was a partner in the Architectural Pottery Company, at Poole, Dorsetshire.

RIDGWAY, WILLIAM. Son of Job Ridgway and joint partner with his brother John at the Cauldon Works until about 1830, when the partnership was dissolved. In 1831 he rented from Joseph Mayer the Church Street Works at Hanley, and eventually became the proprietor of no less than six manufactories, among which were the Bell Works, now Clementson Brothers, and another one close to it, now G. L. Ashworth & Bros. Finding from a visit he made here that the United States offered a good field for the extension of his business, he was not long in putting his plan into practice, Mr. Charles Cartlidge, who afterward became a manufacturer at Greenpoint, being his first agent. Many services were made specially for this market with engraved designs of American scenery and events, among others a pattern called Catskill Moss. (See Historical Earthenware.) Not satisfied with his numerous Staffordshire ventures, he commenced the erection of a manufactory in Kentucky, but it was never completed, as his affairs became involved. He admitted his son, Edward John, into partnership, and the business was carried on by them until William Ridgway's death in 1864.

RIDGWAYS. When Mr. E. J. Ridgway retired in 1872 the style of the firm was changed to Ridgway, Sparks & Ridgway, and upon Mr. Sparks's death in 1878 to Ridgways, the name of the existing firm. The greatest care is taken to preserve the traditions of the house and to maintain the standard of excellence attained by this old firm. Some old dinner ware engravings have been resuscitated and the patterns reissued, which being the style now in demand have proved very successful. One of these, originally issued some thirty or thirty-five years ago, we illustrate. The molds of some stoneware jugs with embossed figures have also been unearthed and revived. These revivals are of much interest, serving not only to show the

tastes of our forefathers, but to determine whether any artistic advance has been made by present-day potters. But these are an unimportant portion of the Ridgway productions, many fine designs

being issued, the success of many of them having been demonstrated by numerous imitations. M 186.

RIDGWAY, EDWARD JOHN, son of William Ridgway, was born in 1814. After his father's death he entered into partnership with Leonard James Abington, and together they carried on business under the style of Ridgway & Abington. When this partnership was dissolved in 1866 E. J. Ridgway erected the Bedford Works at Shelton. Mr. Sparks, the London agent of the firm, and Mr. Ridgway's two sons, John and E. A., were admitted to the firm in 1872, when Mr. Ridgway retired. He died May 11, 1896.

RIGGS, CHARLES, was a manufacturer of pipes at Newcastle-under-Lyme (Staffordshire) toward the end of the seventeenth century.

RIKEI. A Corean potter who early in the seventeenth century at Haji (Japan) began to make a kind of faïence. A part of the raised edge at the bottom of each piece made by the Corean is cut out, leaving a space of triangular form. This is a peculiarity common to the pottery imported from Corea. In Japan Rikei called himself Korai Saiyemon.

RINGLER. A workman at the Royal Vienna Works who carried the secret of making china to Hochst in 1720. He was in the habit of carrying about with him his written recipes. His fellow-workmen made him drunk, obtained copies of his notes and sold them in other localities. Ringler went to Nymphenburg in 1756, and to Ludwigsburg in 1758, after which we hear no more of him.

RIOCREUX. The curator of the Museum of Sèvres, 1823-1871. He was appointed by Brongniart, and his knowledge and affability made him a general favorite alike to dealers and amateurs, his advice and information being always at their disposal and tendered with untiring courtesy. He did much to encourage that artistic revival in France of which Deck was a type.

RIOSAI INOUYE, Smida, Tokio, Japan. A present-day potter, whose productions are much esteemed.

RI-SANPEI. A Corean potter brought to Japan by a general of the army after the Corean War (A. D. 1592), and who founded the Arita porcelain industry.

RISSLER & Co., Freiburg, Germany. Established in 1847. Manufacturers of china. M 187.

RISSNER, KESSEL & STELLMACHER, Turn, near Teplitz. Many of the best Teplitz pieces come from this house, their work being very finely finished. The nude is freely used in association with vases, but always in an irreproachable manner, some of the compositions being really delightful and full of an airy grace both in modeling and finish.

RITTENHOUSE, EVANS & Co., Trenton, N. J. Formerly manufactured Belleek ware.

RIYO-NIU. The ninth generation of manufacturers of Raku ware, in direct descent from Ameya, a Corean who settled in Kioto about 1558-69. (See Ameya.)

ROBALBHEN, M., in collaboration with MM. Laurent, Desrousseaux and L. Labour, has produced a series of vases in faïence, good in form and covered with rich enamels, peacocks' feathers and flowers furnishing the *motifs*.

ROBERT, LOUIS. The son of an official of the Sèvres manufactory. He was in turn a student, a painter, and finally the head of the glass painting department formed by Louis Philippe. When this was discontinued Brongniart appointed him superintendent of the porcelain painting studios, and he was appointed director in 1870. A clever artist and distinguished chemist, he did much in effecting the reorganization of the Sèvres Works after the war. About 1850, when chief of the painters' *atelier*, he devised the use

of clays to which coloring oxides were added, in the decoration of china, but it was not until 1862 that any satisfactory results were shown. He died January 13, 1882.

ROBERTSONS, THE, of Boston. A. W. Robertson in June, 1868, founded a works at Chelsea for the production of brown ware, and was joined afterward by his brother, Hugh C. Robertson, and in 1872 by his father, J. Robertson. At first the production was confined to fancy flower pots, but a wider extension was aimed at, and

an attempt was made to give an entirely artistic character to the productions. Under the style of the Ceramic Art Works the three partners carried on the works until 1884, when H. C. Robertson assumed entire control. In 1888 the works were closed down. In 1891 a number of people interested in Mr. Robertson's work formed a company and placed him at its head, and under the style of The Chelsea Pottery, U. S., the business is now conducted at Dedham. Mr. Robertson has undoubted abilities as a potter, and may yet do

something for American ceramics when the public tires of imitations of Chinese crackle, which at the best can only be regarded as a curious freak of workmanship.

ROBINSON, JOHN. A painter at Pennington, Liverpool, about 1760. He afterward removed to Burslem. A punch bowl painted by him is in the Hanley Mechanics' Institution.

ROBINSON & LEADBEATER, Stoke-on-Trent. Manufacturers of Parian statuary. They succeeded G. Melli (*q. v.*).

ROBITZEK & SONS, East Morrisania China Works, 152d Street, New York. Manufacturers of earthenware.

ROCKINGHAM. This ware, named after the Marchioness of Rockingham, is an earthenware body covered with a brown glaze of more or less beauty. The Rockingham ware of to-day is very different to that first produced at the Swinton Works, Rotherham, late in the 18th century. The body was a fine and compact white earthenware, covered with a brownish red glaze in shaded effects, which it was necessary to dip and fire three or four times before the really beautiful glaze could be considered perfect. Tea, coffee and chocolate pots, jugs, drinking cups, etc., were made and sold in large quantities up to the close of the Swinton Works in 1842. Since then Rockingham ware has been extensively made, and, though the qualtiy has degenerated, it still remains popular. (See Cadogan.)

Rococo. A decorative style which was an exaggerated development of the *rocaille* style. It was characterized by a profusion of meaningless ornament, consisting of scrolls, foliage, and animal forms hopelessly confused and intermingled. As a general term, *rococo* denotes anything that is heavy, ugly and tasteless.

ROGERS, JOHN AND JAMES, founded the works at Dalehall, Staffordshire, now occupied by Knapper & Blackhurst. James Rogers died in 1815, and Spencer Rogers joined his father, and the business continued as John Rogers & Son. They issued several designs in a rich, deep blue, with American views, one of which was the Boston State House plate. In 1842 the works were purchased by James Edwards, and subsequently passed into the hands of the present owners. M 188.

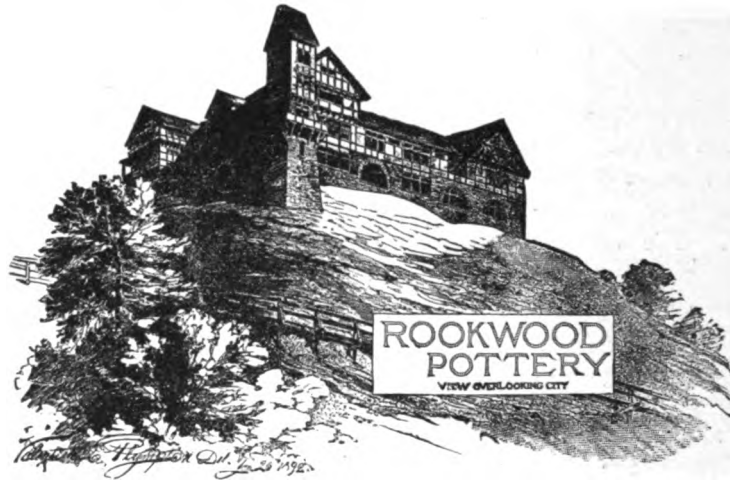
ROMAN. The Romans used earthenware chiefly for the humblest purposes of life, preferring to surround themselves with vases of gold and silver, cups of precious stones, and to neglect the potter's art. Exception to this must be taken to the red-glazed ware of Arezzo, which was worked with a taste approaching the art of Greece. It is not unlike the Samian ware (*q. v.*), which is found

wherever the Romans settled. The noblest examples of Roman ceramic art are the terra-cotta bas-reliefs they used so extensively for the interior and exterior decoration of their houses, though they had to depend upon the Greeks trading with Rome or on those settled in Italy for their production. This is shown from the fact that the greater part of the subjects are taken from Greek history or mythology. The illustration given represents the taming of the Cretan bull by Hercules. About 1600 a manufactory of majolica existed in Rome, the style being similar to that of the Fontana fabrique, and examples are not infrequently met with of similar pieces of a later period. A manufacture of white glazed earthenware and of biscuit porcelain was started by Giovanni Volpato in 1790, and many admirable copies of the antique were produced. The establishment continued until about 1832, when the works closed. A manufacture of coarse glazed pottery still exists in the Trastevere, which supplies the humbler classes with pots and pans of various shapes and startling decoration.

TERRA-COTTA BAS-RELIEF IN THE LOUVRE.

ROMAIN (LE). Sign of a Delft manufactory founded about 1671 by Martinas Gonda. Several pieces from this works are decorated in the center with a Roman on horseback, and they may have suggested the sign.

ROOKWOOD. Much has been written about the Rookwood Pottery and its productions—the glory of American ceramic art. But to fully understand an enthusiast's admiration for it it is necessary to see it and hold it in your hands, for no words can give an adequate



idea of its charm. No mere illustration in black and white conveys to the mind any of the many subtle qualities it possesses. The bloom of the peach, the glint of sunshine on an upturned leaf or on the sea are qualities that through familiarity are vaguely felt, if not understood, and it is so with Rookwood pottery. It has had many imita-

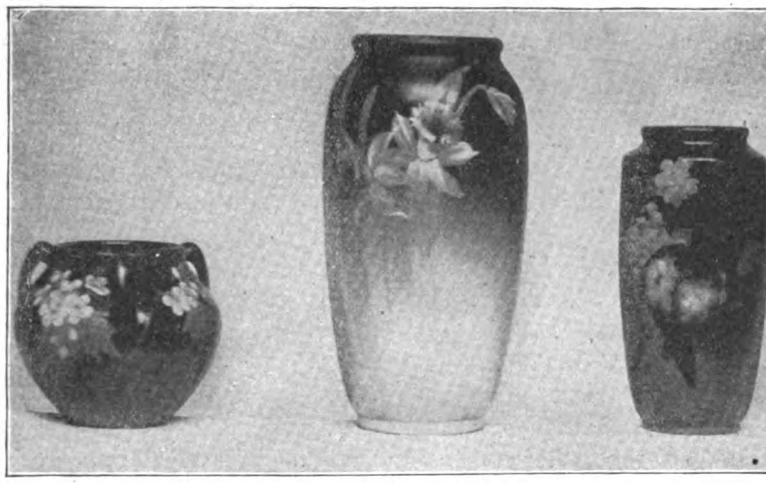
tors, as all successes necessarily have, but these imitations at best are as the peach without the bloom, the water lacking that tiny gleam of light which adds a glamour to the scene and converts a mill-pond into a poem. Rookwood pottery was not the effect of a sudden in-

spiration, but the result of long years of patient labor, of grappling with difficulties, which, hydra-headed, sprang up as soon as one was conquered. Mrs. Bellamy Storer, the originator of Rockwood, had been painting on china as a pastime since 1874, when she became imbued with the idea to create something that should differ from existing ceramics; and after making some experiments at the Dallas Pottery at Cincinnati, her father came to the rescue and gave her an old schoolhouse, which she fitted up as a pottery. The first kiln was drawn in 1880. The object sought for was to make beautiful things out of the simplest materials—the native clays—and colors that would stand the same heat necessary to vitrify the body. The little factory was situated on Eastern avenue, Cincinnati, but later (1892) a new factory was built on the bluff of Mount Adams overlooking all of Lower Cincinnati. It was not until 1889 that the factory became self-supporting, the intervening years having been spent in costly experiments, in failures without number, but from each of which something was learned, and during which time Mrs. Storer's courage had never flagged, supported as she was by the valuable help of Mr. W. W. Taylor, who had co-operated with her since 1883. In 1889 Mrs. Storer withdrew her aid, and the business was transferred to a company under the control of Mr. Taylor. The dominating idea from the inception of Rookwood had been originality of processes and that the productions should owe nothing to foreign influence; and in furtherance of this the staff of artists was recruited from the Cincinnati Art School with one single exception—that of one Japanese artist. There are no mechanical aids, such as printing, employed at Rookwood, and as far as possible the ware is thrown and turned, molding being only resorted to in an extremity. Taking a vase of wet clay, the artist sketches on it whatever his fancy dictates, using slip stained with metallic oxides. This is then fired and afterward enriched with a glaze of extreme depth and

softness. The limitations of the palette were at first extremely few, but gradually new colors were evolved, thanks to the untiring skill of Mr. Joseph Bailey, who had rendered Mrs. Storer invaluable aid

when experimenting at the Dallas Works, and who was until his lamented death, in 1889, superintendent of the pottery. The native clays from the start inclined its color quality toward yellows, browns and reds; but Rookwood is nothing if not progressive, and the products of to-day are entirely different from those of the day before, and may be different to-morrow. Every accidental effect in firing is carefully watched and noted, and these accidents have not infrequently led to effects we to-day the most admire. Among the later developments at Rookwood are the "Aerial Blue," "Iris," and "Sea Green," in which lighter effects are aimed at and obtained, and some charming compositions have been issued in this series. A distant view of a city from the water, with a boat apparently sailing directly toward you, is a wonderful piece of painting, and the beautiful glaze covering it suggests thoughts of early morning on a brilliant summer's day. Even such a commonplace thing as a fungus the fingers of the Rookwood musician has charmed into a thing of beauty, and

the mind reverts to the dim forests with their carpet of wild hyacinths looking like a mist of silver just touched with the sun's rays. Mat glazes have also been produced, sometimes painted with natural flowers, but the one destroys the beauty of the other. Where Indian designs incised in the clay are used, the effect is much more satisfactory. Latterly, Mrs. Bellamy Storer has made a series of designs in which metal mountings are used in combination with the ware, and especial care has been bestowed on the harmonies sought for, and though these pieces necessarily vary in merit, some fine results



have been obtained, as the mountings differ materially from those of the silversmith. A good example of this is a punch-bowl painted with grapes in a very realistic fashion. Other pieces might be mentioned, but as each one has some special characteristic or treatment it is hardly practicable to enumerate them here. The harmony of all the elements which compose it—color, decoration and glaze—combine to make Rookwood what it is—a thing of beauty with a spark of life defying analysis—felt, but impossible to describe. When the beauty of Rookwood ware was once recognized, all the honors that were possible to shower on it fell to its lot. European museums sent for specimens, the various exhibitions it enriched awarded it all the honors in their power, the press and the most noted ceramists of the day unhesitatingly and generous-

ly sang its praises and awarded to it the distinction that, born in America, created from American materials, and enriched with native art, it surpassed anything ever produced in the Old World. Rookwood marks are given elsewhere and at first varied considerably, but in 1886 a definite plan was adopted which has been consistently carried out, and it is now easy to determine the date of any piece issued. These pieces, too, usually bear the marks or initials of the decorators, as it has been always a time-honored custom at Rookwood to give to the painter the credit of his or her work.

A. Incised or painted, usually with a date. The most common mark prior to 1882.

B. A variation of above. Stands for "Rookwood Pottery, Cincinnati, Ohio. Maria Longworth Nichols."

C. In relief or stamped. Sometimes in connection with a date. Prior to 1883.

D. Rarely used.

E. Kiln mark, stamped in color on the biscuit or

F. Impressed in the clay. It also appears in connection with dates.

G. Impressed. Used for a short time only.

H. Impressed. The regular mark from 1882, the date changed each year until 1886.

I. Adopted in 1886.

J. The flame at top indicates 1887.

K. The addition of a flame each year marks the subsequent years, up to 1900, after which a roman numeral is added to mark the years of the present century.

RORSTRAND, near Stockholm. The early history of this factory is somewhat obscure, but it seems to have been founded in 1727, under the patronage of Baron Pierre Adlerfelt. Jean Wolf and Andre Nicholas Ferdinand were the first directors, and received an exclusive privilege for the manufacture of earthenware, but owing to difficulties encountered no great success was made. They were followed in the directorship by Conrad Hunger, a Meissen decorator, and under his skilful guidance the work soon began to assume importance. In 1735 a second privilege was granted for five years for the manufacture of china, and the three crowns of Sweden were adopted as a trademark. The china manufactured was of excellent quality—quite equal in point of merit to that of Dresden. The works at Rorstrand were closed in 1788, but have been revived and are now quite important works. Much of this success is due to the

pluck and energy of the present director, Mr. Robert Almstrom, who from a very humble position has raised himself not only to the position of director of the largest factory in Sweden, but has fitted himself to honorably discharge the duties of Senator, to which he was elected. When the management of the factory was placed in his hands about 200 persons were employed, but thanks to his sterling qualities the new buildings erected under his superintendence give work to over 1,000 employees. The Rorstrand productions are extremely varied, ranging from delicate pieces in china to large majolica pedestals and candelabra of airy gracefulness and harmonious color effects. Distinctly Swedish in character are the Walhalla drinking horns, suggestive of Odin and Thor, supported by a gnome and decorated in a variety of styles. The Swedish peasant is much in evidence, groups illustrative of the works of Bellman, the Robert Burns of Sweden, being used to decorate mugs, plaques, etc. Some of the colored glazes used on jardinières, etc., are of beautiful tone, notably a rich plum color and a combination of blues and turquoise, which yields a very charming effect. Mr. Wallander, a modeler and painter, does excellent work. M 190.

ROSEBACK, Chinese porcelain, generally eggshell, covered on the back with a ground of rose color.

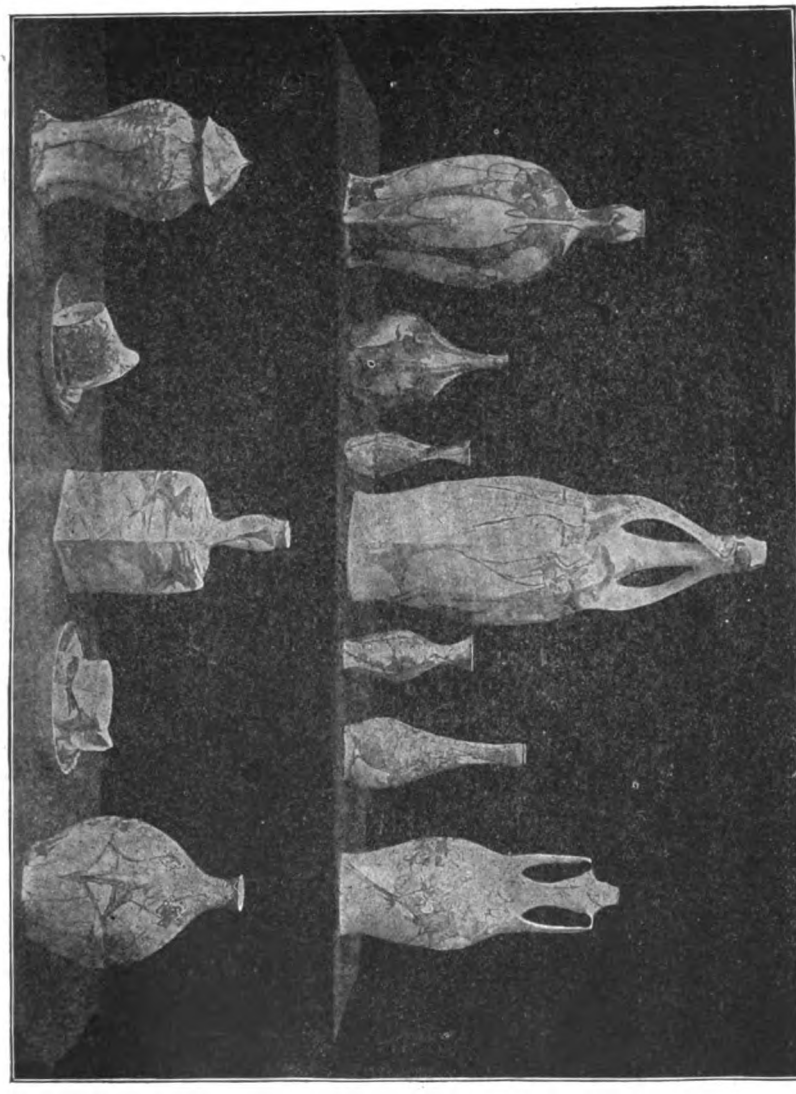
ROSE. A painter employed at Lowestoft. He was a Frenchman who arrived in England shortly before the French Revolution and continued at Lowestoft until his sight failed him. He became very poor, and his later years were employed in carrying water. The rose

was the flower he employed most frequently, perhaps on account of his name, possibly because the rose was the emblem of the town.

ROSE DU BARRY. A beautiful pink color first produced at Sèvres and called after Madame Du Barry. She, however, can lay no claim to the distinction, as the color was invented twelve years before her appearance at Court. Rose Pompadour would be a more fitting appellation.

ROSENBURG DEN HAAG. Quaint shapes and harmonious colorings have ever characterized the products of the Netherlands, but within the last few years there have been phenomenal strides made in the art of potting, so that to-day the Netherlands lead in exquisite fineness of ware and perfection of coloring. In the blue especially, Rosenburg has been wonderfully successful. The old "Delft" blue seemed to have become a lost product, when in 1883 a German nobleman, Wolf, Freiherr von Gudenburg, began making experiments. He succeeded in making a blue, considered finer and richer than the one he strove to imitate. He had been occupied in painting plaques in the firm of Joost 't Hooft & Labouchère in Gravenhage. After two years of experimenting he moved his atelier to Rosenburg in company with Mr. Colenbrander, where they began firing underglaze work, and the manufactory was established on an elaborate scale, and the products were more numerous than the dividends, in consequence of which the factory lay idle for a time. However, in 1893 an esthetical adviser was called in. This was Heer J. Jurriaan Kok, who later became director of art in the works. This gentleman was an architect, whose fine sense of form as well as of color infused new life in the business, that was soon on a firmer basis. He began making small objects such as inkstands and ash receivers, endeavoring to produce a fine transparent porcelain body that should equal in beauty the fine color and glaze already obtained. Ornamental objects were chiefly produced, the material being too fragile for those of utility. Mr. Kok had an oven built according to his own ideas, that could withstand the intense heat to which he subjected his ware, but his lack of knowledge of practical potting induced him to collaborate with an eminent chemist, M. N. Engelen. The experimental stage was soon passed and results assured. The Paris Exposition was looked forward to as the golden opportunity to display before the world the result of their recent years of labor, and there they were placed in direct competition with the products of Sèvres and Meissen. The Rosenburg ware attracted widespread attention from the striking individuality of its colors and forms. Some of the colors, the blue and some of the greens, are put on the ware in its

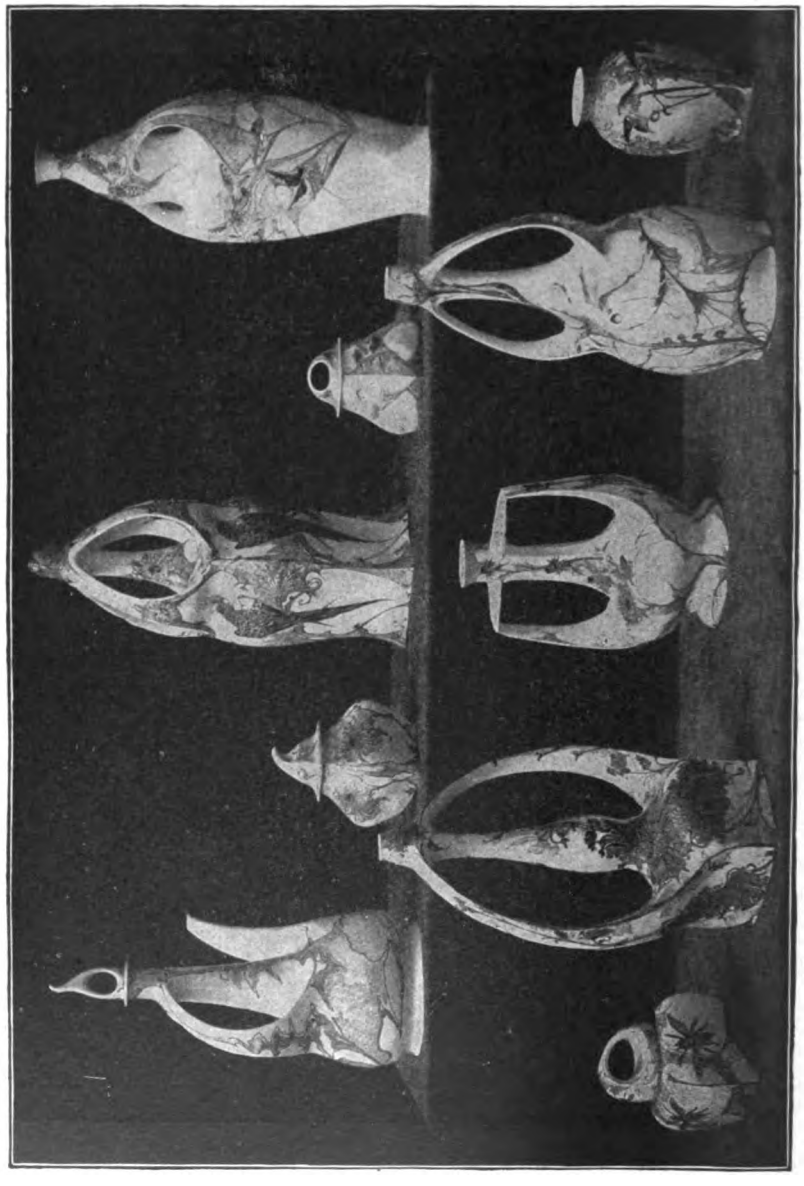
clay state, and fired, the rest of the decoration being painted on the biscuit. The Rosenburg manufactory is the only one that has produced colors fired on the clay that will stand the terrific



ROSENBURG PORCELAIN.

heat to which the body and glaze are subjected. The charm of coloring, form and decoration speaks for the taste of the Netherlanders, which is directly opposed to the use of gold

or the lavish and ornate in decoration. Both the Queen and the Queen-mother have visited the manufactory at Rosenburg, and



ROSENBURG PORCELAIN.

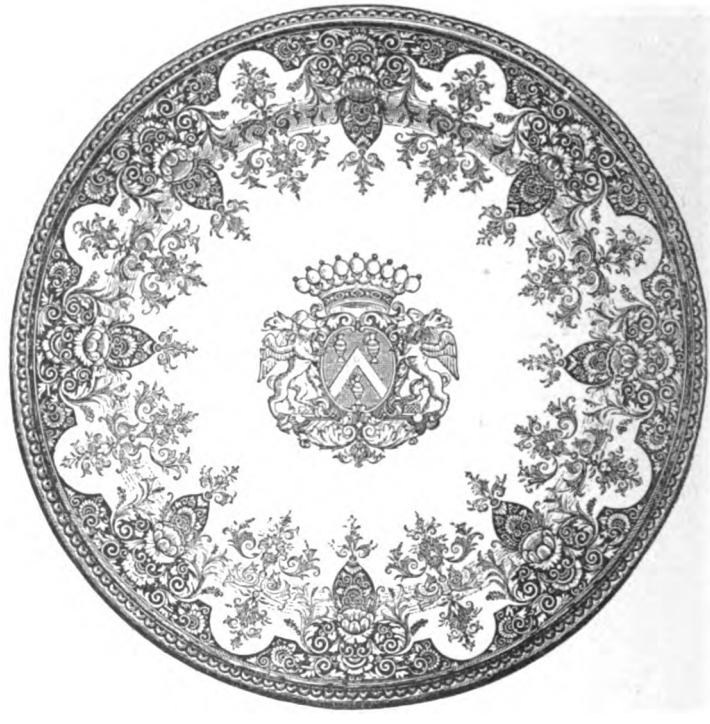
foster its interests. In connection with the manufacture boys are taken as apprentices from the age of fourteen years up, and each

is put in the department of work for which he shows special aptitude —either modeling or painting, etc. Those in the decorating department are required to attend evening classes in the art school of The Hague, which, supplemented by the practical work of the day, is producing most able artisans. The success of the factory is considered by its heads as largely due to this method of training its workers, as each individual is in direct line of promotion in whatever branch he shows most ability, and thus each takes a personal interest in the interests of the establishment. At the Paris Exposition medals were awarded, not only to the establishment, but to individual workers, the foreman, S. de Veer, receiving the silver medal, and the gold medal was bestowed on D. de Ruiter, who was chief decorator. The ware is all marked in good Dutch "Den Haag" (see mark) instead of "La Hague" as one might expect, and each piece is dated and marked with the decorator's initials. In the mark the Stork is the crest of The Hague or "Den Haag." The Bee, cipher and date are the sign of the Potter's Guild. Rosenburg den Haag is the name of the suburb of The Hague, where the manufactory is situated. The crown is the mark of favor bestowed by royalty on the manufactory. The ware first dated can be determined by a small anchor that was used as the symbol of hope. Rosenburg ware stands to-day as the proud exponent of the Netherlander's ability to overcome many obstacles, by determination united to skill, and nowhere can we find finer examples of ceramic art. Our illustrations, all of which are of porcelain pieces, will give an idea of the extreme originality of the shapes, but much of the delicate brushwork of the designs is lost in reproduction. Masses of color are obtained not by flat washes, but by lines. The porcelain itself is a marvel of workmanship and one wonders how such large pieces with their acute angles can ever be successfully produced in the extremely delicate body with its soft ivory glaze. The ware is all cast, but it is casting of the highest order. In a word this Rosenburg porcelain is a veritable triumph, both of art and manufacture. M 189.

ROSEVILLE POTTERY, Zanesville, O. A large manufactory producing an infinite variety of shapes in colored glazes in jardinières, pedestals, umbrella stands, etc.

ROUEN. While Nevers antedates Rouen in the manufacture of faïence, the productions of the latter far surpassed those of the former, and the old Norman city takes the first place in workmanship and originality, instituting a distinct style which was later imitated at Paris, St. Cloud, Sincenny, Lille, Quimper, etc. The manufacture introduced by Masseot Abaquesne (*q. v.*) in the middle of the

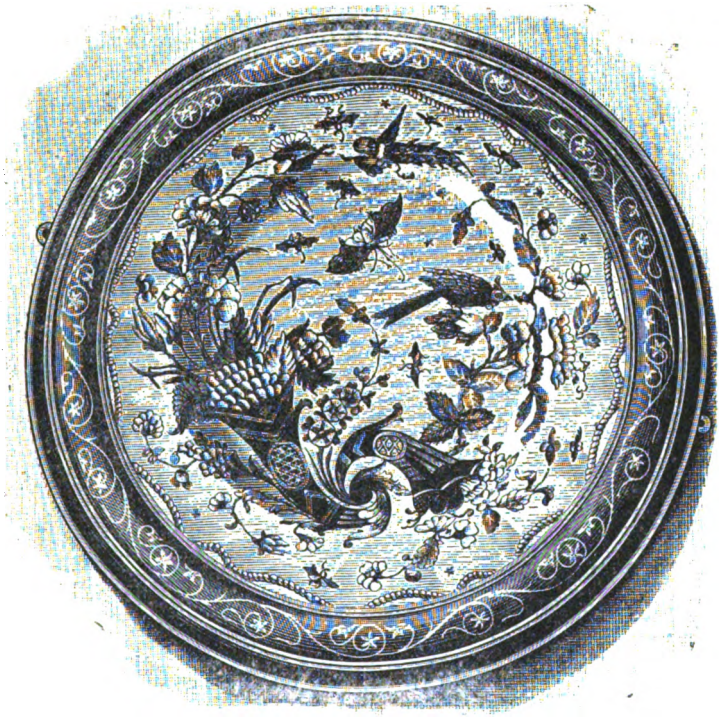
sixteenth century seems to have died with him, and it is not until 1644 that we find that Nicholas Poirel obtained a license to make and sell faience, which he almost immediately disposed of to Edme Poterat, and to whom is due the credit of having introduced in Rouen the manufacture of faience, which occupies such an important part in the history of French ceramics. As at Nevers, so at Rouen the influence of Italy seems to have been strongly felt, and the name of Custode, *potier,* who was doubtless related to the Custodes of Nevers, appears on several deeds drawn up at Rouen. For



ROUEN DISH—À LAMBREQUIN.

a time the productions were imitations merely, but in 1673 Louis Poterat, son of Edme Poterat, obtained a fresh privilege, and the Norman potters initiated that distinctly characteristic decoration termed *à lambrequins* and *à broderies,* an illustration of which we give. This style may have been suggested by a Chinese decoration, though, from the fact that textile fabrics, lace, and the ornaments of books of the period were in the same style, it seems more probable

that the Rouen potters availed themselves of the material nearest to hand. Louis Poterat was a potter of no mean skill, and succeeded in producing porcelain (see Poterat), but for some unexplained reason did not continue its manufacture, and the credit of being the first to produce china in France has generally been bestowed elsewhere. In the early part of the eighteenth century the Rouen manufacturers became numerous, and were established for the



ROUEN DISH—CORNUCOPIA.

greater part in the suburb of St. Sèver, upwards of 2,000 men being employed. The prevailing distress in France, curiously enough, was the direct means of stimulating the efforts of the Rouen potters to vie with each other in producing beautiful and sumptuous faïence worthy of adorning the tables of the great. Continuous wars had exhausted the resources of France; the inundations of the Loire and the famine of 1709 had further aggravated the situation, and the king, in order to raise funds, sent his gold plate to the mint and substituted for it the faïence of Rouen—an example imitated by

the nobility. It was then that were manufactured those splendid faïence services which have in the center or border remarkably disposed coats-of-arms, in which the colors are figured in the conventional lines used by heraldic engravers. Polychrome decorations were known, it is true, but the Rouen potters confined themselves almost exclusively to pieces in blue, occasionally

ROUEN EWER.

heightened with Indian red. The *lambrequin* patterns consisted of two alternate corresponding designs repeated so as to form a border. This arrangement, simple and ingenious, was productive of very rich effects. The *rayonnant* style, which consisted of a border converging toward the center, in the style of the rose windows of the old cathedrals, was made by the same device. Figures were very sparingly introduced. Of the

same period are the pieces of faïence, on a Persian blue ground, in imitation of the celebrated Nevers wares, but, though the drawing is more carefully executed, the blue ground lacks the purity and depth of that of Nevers. Decorations in polychrome date from the beginning of the eighteenth century, and later became more important and original as servile copies were discontinued. One of these, originated by Guillebaud, is composed of Chinese landscapes and temples, brilliantly painted, and usually finished with a red check pattern alternated with white spaces on which flower sprays were tastily arranged. Toward the end of the century the designs became less set, sprays of flowers—carnations and chrysanthemums, principally—being freely used, often with central ornaments of musical instruments, quivers, torches, etc. Soon afterwards the cornucopia pattern was dominant, and must have had a large sale. The illustration gives a good idea of the pattern. Louis Poterat, whom we have previously mentioned, was succeeded by Nicholas Fouquay, and under his skilled guidance many of the most important and perfect works of the Norman industry were brought out. The ewer of which we give an illustration is an example of his work. The Norman productions were not confined to table services—jardinières, busts and pedestals and a variety of similar articles being made. The industry came to an end through the increased use of porcelain, and more particularly by the treaty between France and England permitting the introduction of the Staffordshire earthenware, which, on account of its novelty and cheapness and its superior wear-resisting qualities, brought about the decline of faïence, from which it never recovered. Of late years several French manufacturers have revived many of these Rouen designs, and they have found a ready sale as ornaments or curiosities. Present-day manufacturers might take a lesson from their leading characteristic—the harmony of the decoration with the shape, one enhancing the value of the other, each ornamental detail—as in architecture—occupying its proper place. The success of Rouen led to a host of imitators, some servilely and clumsily copying, others adopting the style, but treating it with artistic feeling and execution. M 191.

ROUS & CULLEN. In 1626 a patent was granted to Thos. Rous and Abraham Cullen for "the art of making stone pottes, etc., never formerly used in our Kingdome of England."

ROUY, near Sincenny (Aisne). In 1790 M. de Flavigny founded a small manufactory in this locality, the products of which may be easily confounded with the general run of faïences of Sincenny. After the death of M. de Flavigny, who perished on the scaffold in

1793, the manufactory of Rouy passed into the hands of Joseph Bertin, and later into those of his son, Theodore Bertin, who considerably enlarged it. Faïences are occasionally met with bearing the name Rouy in blue.

RUBATE, PASQUALE, an artist of the last century at Milan.

RUDOLSTADT, near Jena, Thuringia. An artificial porcelain was made here soon after 1758 by Macheleid (*q. v.*), the original works consisting of a staff of but four workmen. The works were trans-

ferred to Volkstadt, and in 1795 gave employment to 120 workmen. This small beginning led to the erection of other Thuringian potteries, among them being Wallendorf, Limbach, Gotha, Anspach, Ilmenau, Breitenbach and Rauenstein. The Rudolstadt factory was in operation in 1868, but was making only common blue and white ware. Here also is the New York and Rudolstadt Pottery Company, established in 1882 and controlled by L. Straus & Sons, New York. The products consist of finely conceived and elaborately decorated vases, etc., both in china and earthenware. Especial attention is given to figure subjects, and some beautiful designs are issued from the large staff of artists employed. We understand that there are from twenty-five to thirty painters engaged on figures alone, and considering the limited number of artists capable of properly

depicting the human form this is rather remarkable, especially in view of the success of the pieces that are produced with such prodigality. These artists are only a tithe of the artistic staff, numerous others finding vent to their artistic expression in landscapes, flowers, etc., many of the latter being really charming creations. A large staff of modelers is also employed and many fine figures are produced, thus keeping up the traditions for which Rudolstadt has been so long celebrated. The temptation to produce large quantities of goods at the expense of their artistic merit has been sedulously guarded against and a policy so wise has had its reward in a growing appreciation on the part of the public for the productions of the New York and Rudolstadt Pottery Company. The selection of ornamental goods is of such a varied character that a description of them would read too much in the nature of a catalogue; but such care is exercised to produce only meritorious works, to the exclusion of the simply pretty, that the mark on the back of these goods has become and is recognized as a standard of excellence. We give illustrations

of some of the products of the firm which will give an idea of their general excellence and the variety of the manufacture. The firms of Beyer & Boch, E. Blome & Son, who make tinted figures, and Schafer & Vater are also present-day manufacturers at Rudolstadt. At Plaüe, near Rudolstadt, is the manufactory of Schürholz & Son, an old established firm, making a large line of ornamental goods, many of them possessing much artistic merit, in addition to services of dinner and tea ware.

RUE DE CRUSSOL. Manufactory termed *du Prince de Galles*, founded by an Englishman named Potter. He was the first in Paris to make fine earthenware similar to that of England.

RUE THIRAUX, Paris. The porcelain made here was styled *porcelaine à la reine* (q. v.). Under Guy and Housel the ware was marked with their initials and "Rue Thiraux à Paris."

RUE POPINCOURT (manufactory of), Paris. This was originally owned and managed by Nast, who was succeeded by his two sons. The porcelain is not very remarkable, and is marked "Nast" in stencil. The manufactory was subsequently transferred to the Rue des Amandiers.

RUMMEL. A potter of Ulm, Würtemberg, from 1780 to 1800. He made statuettes illustrating the local costumes, many of them being portraits from life.

RUSSIA. About 1700 some Delft potters were induced by Peter the Great to emigrate to St. Petersburg, where a manufactory was established. In 1770, or thereabouts, another works was started at Revel, potters and painters being obtained from Germany. The Empress Elizabeth purchased in 1756 a manufactory near St. Petersburg, where the manufacture of china was commenced, and has been uninterruptedly continued until the present day. Under Catherine II. it was considerably enlarged, and in 1815 artists from Sèvres came over to direct it—Seubach, a painter of military subjects; Moreau, a decorator; and Davignon, who made the largest vases in a single piece ever made in Europe. Except the modelers and some painters, all the artists are now native. The paste is very hard and of a bluish cast, but the prices demanded are so high as to be beyond the means of all but a few, and consequently the factory has never attained any very considerable extension. An establishment was formed at Twer by Garnier in 1756, which produced figures in peasant costume, with good expression and fine execution, but of coarse material. Natural porcelain has been made at Korzec, in Poland, since 1803. Merault, a chemist, and several Sèvres artists went there to take charge of the works. The brothers Korneloff have a china works at St. Petersburg, which was established in 1827. An Englishman named Gardner established a factory at Moscow in 1789, and there were also works there owned by A. Popoff and M. Gulena. M. S. Kousnetrof & Co., Moscow, make Russian figures showing native costumes, both official and non-official. About seventy miles from St. Petersburg Kusnettsoffs have a pottery employing about 2,000 hands. Speaking of the size of these Russian factories, the accredited traveling correspondent of the London *Pottery Gazette* says: "I was assured that one Russian firm manufacturing earthenware and china had in its service in its various factories and places of business, thirty thousand hands, all told." This would include employes in the stores in the various cities, run by the factories; that seeming to be the custom of the Russian potteries.

Toward the close of the last century porcelain was made at Savak by M. Volkoff.

RUSSIAN POLAND. Cooking utensils similar to those made at Sarreguemines are made here, but the clay is a little darker. They are very cleverly potted.

S

SACRED AX. One of the Chinese honorific marks.

SACRED HORSE. A Chinese symbol. The philosopher Fo is said to have been inspired with his solution of the methods of nature by the marks on a horse which suddenly appeared to him from the river.

SACRED THINGS. The treasures of writing. (See Honorific.)

SADLER & GREEN, Liverpool. The inventors of the art of printing on pottery (*q. v.*). Their works were in Harrington Street, back of Lord Street.

SAGGERS, or SEGGERS. Receptacles made of coarse clay in which the ware is placed during the process of firing to protect it from smoke and dust. Piccolpassi, writing in 1548, speaks of them as being used in Italy. In Japan their use was accidentally discovered in 1770 by Kiheiji, a potter of Arita.

SAMEDIT (Landes). A factory was founded here in 1732, a privilege being accorded to the Abbé Roquepine for making faience. The most common decorations are landscapes with figures of children in soft, dark colors. Later the work deteriorated and the decoration was composed of flowers on thread-like stems. The enamel was white and thick. The manufactory existed until the beginning of this century.

SAMIAN WARE. This celebrated pottery of the Romans was made at Arretium (modern Arezzo). The paste is close and fine and of a fine rich red, with a glaze so thin as to be almost undistinguishable. It was extensively used for domestic purposes as well as for ornament. The decorations consist of fine moldings in relief, incised rings and intaglio patterns. Potters' names are often found on it, as are also inscriptions, such as *"Bibe Amico de Meo!"* (Friend, drink with me!) This ware was held in the highest estimation by the Romans, and wherever their conquering legions went a supply of their beloved Samian ware accompanied them.

SAND, SIXTUS VAN DER. Master potter of Delft in 1705. His

works are very rare, though possessing no particular merit. They are sometimes marked with an S.

SANDA WARE. The kiln from which this ware emanated was erected in the period Genroker (A. D. 1688-1703) on the Arita principle by the Prince of Setsu. The factory was started for the purpose of imitating the Chinese celadon, and great success attended the enterprise. Experienced ceramists can scarcely distinguish the imitation from the original, or even from the ancient Japanese celadon, which was also a reproduction of the Chinese ware. Sanda celadon is much appreciated, but the works have declined, and only an inferior porcelain is now made.

SANDERS, WILLIAM, founded a factory at Mortlake, in Surrey, about 1752, where both Delft and earthenware were made. In 1792 it was being carried on by a son of the founder, but in 1811 the owners were Wagstaff & Co. In the South Kensington Museum are two specimens of Sanders ware—one a punch bowl twenty-one inches across and covered with white tin enamel; the other a panel of twelve tiles with a landscape in blue.

SAIJIRO GOTO. A Japanese potter who in 1650 erected a kiln at Kutani, and made a ware with red ground decorated with gold outline. The decoration found favor with Komatsu Dainagon, who several times ordered articles made in this style, some of which are still extant and of great value.

SAJURO MIYAI. A Japanese potter who within the last decade has made at Otamwa, near Wakayama, imitations of Kishiu ware.

SAGUNTUM, near Valencia, was celebrated in Roman times for red ware and was the seat of extensive potteries.

ST. AMAND-LES-EAUX. One of the most important potteries of the north of France, where originated a special and particular style of decoration in the shape of delicate borders elegantly outlined on a whitey-brown or blue enamel ground in white enamel, sometimes enhanced by flowers or bouquets painted under the glaze. The manufactory was founded in 1740 by Pierre-Joseph Fauquez, of Tournai, and its direction was continued after his death in 1741 by his son, Pierre-François Joseph Fauquez, who was an intelligent and skilful potter, not only thoroughly versed in the technicalities of manufacture, but of an artistic disposition, as evidenced by the character and variety of the products. A dish with hollow flutes decorated with flowers in Chinese style in camaieu blue is signed "St. Amand sur 5 Nov. 1757, N. A. Dorez." This N. A. Dorez was the son of Barthelemy Dorez, of Lille. There are two factories in existence at St. Amand at the present day. M 192.

ST. AMANS, DE. After the introduction of English earthenware in France the ware fell into disrepute owing to the injudicious economy exercised by the manufacturers, and the labor of Hall and other English potters who had been instrumental in introducing the industry and placing it upon a good foundation seemed in danger of being lost, as the ware produced was insufficiently fired and the glaze so soft that it was scratched by the slightest touch. The manufacture seemed on the point of being discontinued altogether, when M. de St. Amans undertook to save the industry from ruin. He was a scientist and had spent some years in England, and had gained a knowledge of the manufacture of earthenware as practiced in Staffordshire. Brongniart did all in his power to encourage the attempt and placed all the resources of Sèvres at his disposal, and in a short time the manufacture was resumed, first at Montereau and afterward at Creil.

ST. CLOUD. A faïence manufactory was established here toward the end of the seventeenth century by Chicanneau and his sons. The style of Rouen was at first very servilely copied, but later gave place to more originality, conventional scrolls of flowers being a characteristic. Here was manufactured the services for the use of the Court of Louis XIV., bearing on a cartouche the initial letter, under the royal crown, of the château for which they were destined. The pharmacy vases preserved in the Hospital of Versailles, which was founded by Louis XIV. at the end of the seventeenth century, may be taken as types of the original decoration of St. Cloud. The factory seems to have attained a reputation for making special pieces and sets to order, the practice being mentioned by A. de Pradel in the "*Livre commodes des addresses*," published in 1690. About 1696 Chicanneau succeeded in producing *pâte tendre*, being no doubt fully acquainted with the process discovered by Poterat, of Rouen (*q. v.*), as the early St. Cloud china is almost identical with that of Poterat. His son obtained, May 16, 1702, letters patent that gave him for twenty years the exclusive privilege of manufacturing porcelain in France. After Chicanneau's death his widow, Barbe Coudray, married Henri Trou, who became the director of the manufactory. The manufactory immediately became popular, and the King, Monsieur his brother, and others of the nobility, did all they could to encourage the new industry. The porcelain of St. Cloud is of a fine milky-white color, is very transparent, and is carefully decorated, sometimes with lambrequins, at others with Chinese and Japanese patterns. The manufactory was destroyed in 1773 by an incendiary fire, and was not rebuilt. It had been for

some time declining. The St. Cloud porcelain was marked originally with a sun, emblematical of Louis XIV., but in 1712 it was replaced by the initials St. C. surmounting the letter T., the same mark being also used by Trou on faïence. M 193.

ST. DENIS-SUR-SARTHON. This manufactory of faïence was founded in 1750 by Jean Ruel, and was directed during the first years of its existence by Pierre Pelleve, formerly director of Sincenny. He brought with him his son and several of his own workmen. Thus the decorations were similar to those of Sincenny, though not so well executed. Later a new type of decoration was originated, composed of two leaves alternated with buds. Plates and cider pots, with the names of the owners, were also extensively manufactured. The manufactory existed up to 1860.

ST. JEAN DU DESERT, Faubourg de Marseilles. A faïence factory of minor importance existed here in the latter part of the sixteenth century. It was closed in 1709.

ST. OMER. After having attempted to found a factory at Dunkerque (*q. v.*), Louis Saladin obtained in 1751 the privilege of establishing a fabrique at St. Omer. Its productions were similar to those of Bordeaux—soup tureens and vegetable dishes being made in the form of cauliflowers and other vegetables. It existed up to 1791, and its products are easily confounded with those of other factories in the north of France.

ST. PAUL (Oise). The manufactory of St. Paul, which existed in the latter part of the eighteenth and at the beginning of the nineteenth century, produced faïences of quite ordinary description, decorated in colors under the enamel with figures, flowers, etc. A drinking pot in the Sèvres Museum, in the form of a mounted French guard on a cask, holding a bottle in his hand, is marked St. Paul.

ST. SERAIN (Nievre). There was a stoneware manufactory here in 1641.

ST. VALLIER, on the Rhone. Here are manufactured the goods known as *terra à feu*—fireproof ware—from an inferior sort of china clay found in the district. The ware is fired at a tremendous heat and glazed with a felspathic glaze, rendering them free from crazing and peculiarly adapting them to cooking purposes. The body is cream-colored, the decorations principally in blue. The principal factory is that of M. Revol, who has introduced a very beautiful rose-colored glaze with which objects of a more ornamental character are made.

SAINTES (Charente Inférieure). This little town, made illustrious by the works of Bernard Palissy, continued for a long time

the manufacture of glazed pottery, At the end of the seventeenth century it had a manufactory of white faïence, and in 1788 there were four of these fabriques in activity.

ST. YRIEIX. In 1765 Madame Darnet, the wife of a surgeon, found here a peculiar soft earth of great whiteness, which afterward proved to be kaolin, and which led to the manufacture of hard porcelain at Sèvres in 1769 and the founding of the vast industry at Limoges. Madame Darnet reaped no reward for her discovery, a discovery which enriched many, until 1825, when, her poverty being discovered, the facts were brought to the attention of Louis XVIII., who granted her a small pension. St. Yrieix supplies both kaolin and petuntse."

SALT GLAZE. Salt glazing is effected by throwing common sea salt into the oven when the heat is greatest. The soda in the salt being decomposed under the action of watery vapors by the silica of the paste or body, the fumes fix upon the surface of the ware in the shape of minute drops or granulations, giving an effect similar to the peel of an orange. The glaze is often imperfectly distributed, the soda vapors not reaching every place in the same proportion, so occasionally one side may be dry and the other highly glazed. Red lead is sometimes added, and the fluidity of the mixture makes the granulations scarcely perceptible. Salt glazing was used in Germany early in the sixteenth century, and in England a patent was granted to Rous & Cullen in 1626 for the manufacture of stoneware same as that manufactured in Germany. Palmer, of Bagnall, is credited with having in 1680 introduced salt glazing into the Staffordshire potteries—an honor which should be accorded to the Elers. The story connected with Palmer's alleged discovery is too absurd to seriously consider. The salt glaze ware was a considerable advance on the heavy stoneware or clumsy Delft, and when first the attention of collectors was drawn to it it was erroneously described as "Elizabethan ware." Its manufacture continued for the greater part of the last century, when it was superseded by cream-color ware, though a salt glaze factory is said to have existed in Burslem up to 1823.

SALTZEN, AUG., Eisenach. Manufacturer of terra-cotta and majolica. Established in 1858.

SALTBURG, Germany. In the Schloss here is a wonderful chimney piece in terra-cotta, which has been in its present position since the fifteenth century. It is interesting as showing the early development of the potter's art in Germany.

SALVETAT, ALPHONSE. A distinguished chemist of Sèvres who

died in 1882. He largely minimized the loss in the production of *pâte-sur-pâte*, establishing as the result of his careful research several rules which, though not actually preventing accidents in the firing, considerably reduced the risk. He also annotated and brought up to date the two last editions of Brongniart's "Traité des Arts Céramiques."

SAN FELIPE. In 1239 James I. of Aragon granted a charter to the Saracen potters of Xativa (San Felipe), relieving them from servitude on payment yearly of one besant for each kiln.

SANS, THOMAS and WILLIAM. Staffordshire potters who in the middle of the seventeenth century made earthenware dishes decorated with slip.

SANTA CASA (Holy House), Loretto, Italy. There is a splendid collection of Italian majolica here from Urbino and Castel-Durante, presented by Duke Francesco Maria in 1631. A grand duke of Tuscany once offered for them an equal number of silver vases of the same weight, and Louis XIV. offered for five of them painted with the four Evangelists and St. Paul, five golden statues of the same persons. They were painted by Orazio Fontano. It is stated that the dust and dirt from the floors of the house was collected and sent to a pottery to be mixed with clay and fashioned into cups and bowls which were inscribed *"con-pol-di-s-casa"* (with dust of the Holy House). Holy water was sometimes mixed with the dust, in which case *"et aqua"* was added after *"con-pol."* They were painted with figures of the Virgin and Infant Saviour.

SARACENS. This was the current designation among the Christians of Europe in the Middle Ages for their Moslem enemies, especially for the Moslems in Europe. In earlier times the name of *Saraceni* was applied by Greeks and Romans to the troublesome nomad Arabs of the Syro-Arabian desert, who continually harrassed the frontier of the empire, from Egypt to the Euphrates. It is easy to understand how, after Islam, the name came to be extended to the Moslem enemies of the empire in general; but no satisfactory explanation has been given of the reason why the Romans called the frontier tribes Saracens. It is most natural to suppose that they adopted some name of a tribe or confederation and used it in an extended sense, just as the Syrians called those northern nomads by the name of the tribe "Tayyi." The common derivation from the Arabic *sharkî*, "eastern," is quite untenable. Springer suggests that the word may be simply *shoraka*, "allies." (*Ency. Brit.*) The word Saracen, however, is so identified with the conquerors of Spain and Italy as to have become pottery nomenclature. Stanniferous enamel

and *reflet à métallique* were both known to them and reached Europe through them. Saracenic pottery is Persian style, modified by Arabian tastes.

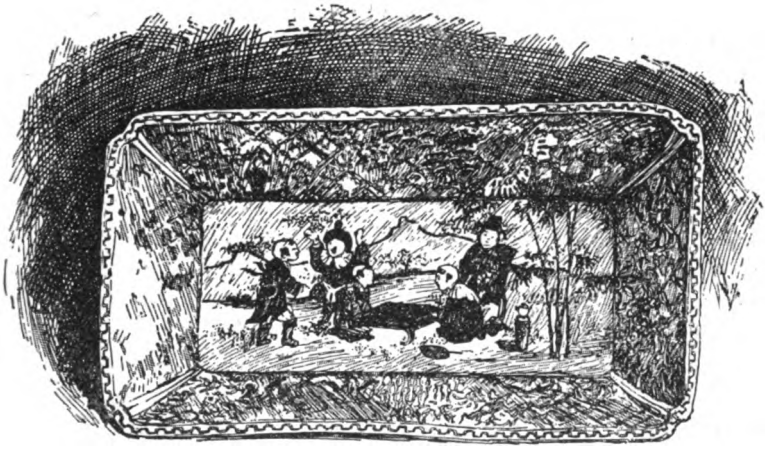
SARREGUEMINES. This manufactory was founded in 1770 by Paul Utzchneider and has been carried on ever since by the same family, the present firm name being Utzchneider & Co. To retain its claim as a French factory the firm have built and operate a branch works at Degoin, in France. The productions are very varied, ranging from finely decorated china to earthenware and figures and groups in biscuit. Jasper ware is also made, as is also majolica, principally in large pedestals and vases. Some very good specimens of mural decorations on tiles are produced here. M 194.

SASSUOLO, near Modena, Italy. The manufacture of enameled earthenware was introduced here by Gio. Andrea Ferrari in 1741. He obtained from the Duke Francesco III. the right of making ordinary white and painted majolica, that is, stanniferous enameled wares, to the exclusion of all rivals in the duchy and all importation from other parts, except during the fair held at Reggio. The work commenced in 1742, and in a few years he was joined by Gio. Maria Dallari. Their rights were from time to time renewed, and in 1756 confirmed to the extent of granting the monopoly to the family for three generations; the materials were not to be charged with import duties; and these advantages were further extended in 1761 by even excluding the foreign wares from the fair at Reggio, the manufacturers on their part being bound to supply the duchy with an abundance of good wares at moderate price. The wares produced were of great variety—among others pieces painted in the Japanese style, with flowers and gilding. Groups of figures were also made and a large export business carried on.

SAVIGNIES (Oise). Pottery glazed in rather light, smooth green, and earthenware covered with smooth blue enamel was made at Beauvais and several other places in the neighborhood, particularly at La Chapelle-aux-Pots and at Savignies. The latter were so especially renowned that when Francis I., coming to Arras in 1520, passed by Beauvais the diocesan chapter decided that it would give to the queen, who accompanied the king on his voyage, candles and "vases of Savignies," and later by a deliberation of the 4th of December, 1536, it was decided to make a present to the king of a "buffet of Savignies." The same presents were made to him also in 1540 and 1544. In 1689 the Savignies pottery was still considered worthy of offering to the Queen of England, on her passage to Beauvais, when, fleeing from London, she came to Saint-Germain.

The manufacture of common earthenware is continued to the present time at Savignies.

SATSUMA. Although Japanese writers give an earlier antiquity to Satsuma, the earliest specimens only date from 1598, when Shimazu Yoshihiro, a daimio of Satsuma, returned from the invasion of Corea, and brought with him upwards of one hundred workmen, among whom were a few skilled potters. These brought, not only their implements, but their materials, and commenced the manufacture of pottery on the Corean system. The taste of the Coreans was rough and primitive, and it is tolerably certain the early ware made by these potters of Satsuma was of the same rude type. Authentic specimens of this early period are of a grayish tint, of a fine hard



paste covered with a thick red glaze, of which several coats were applied, sometimes with scratched ornaments imitating basket work, or bearing the characters "Koka-Tsuchi"—*i. e.*, earth from the river Koka in Japan. The next information we have of Satsuma is when Mitsuhisa, prince of Satsuma, in 1670 established a private factory and employed a celebrated painter named Tangen to assist in the decoration. He introduced a style of decoration which forms quite a separate period in the history of the "princely factory." Tangen, discarding the Corean style, introduced freehand drawing, and decorated and painted a number of pieces with figures, etc., copied from the kakemonos (hanging pictures) of the then celebrated Kano school. He employed a rich yellow glaze, and specimens of the "Satsuma Tangen" are so rare that only one specimen is known to exist in Europe. When Prince Mitsuhisa died the factory either ceased

to exist or produced very little. About 1750 Prince Akihira resumed his family's patronage of the factory and brought its productions to a high state of perfection, and it was then that it began to produce fine and artistic products. These are distinguished by the density and hardness of the clay. It is as dense as stoneware and almost as hard as porcelain, and is usually of a fine copper red color. In addition to the ivory crackle ware, with its rich glaze, perfection of finish in its enamels, and its minute crackle no larger than the roe of a fish, there was also produced beautiful mixed colored glazes, which the Japanese learned from the Chinese, and a black glaze made from manganese, showing always brown tints. The ivory crackle ware was made in figures, bowls, vases, etc., and old specimens are distinguished by the poor quality of the gold, the perfection of modeling to the smallest detail, and the qualities noted above. Satsuma reached its last stage of development about the year 1820. For the last twenty-five years large quantities of florid, heavily-gilt and richly-painted ware has been made at Awata and Kioto and passed off as Satsuma.

SAUVAGE, CHARLES, called Lemire, a distinguished sculptor, died about 1802. He was for twenty years art director of Niederwiller, in which he entered as a modeler, after working at Luneville and St. Clement. One of his most important works was an allegorical group of great beauty, representing the marriage of Louis XVI. and Marie Antoinette. It was made expressly for Marie Antoinette, and was placed in her bedchamber in the palace of Strasburg when she passed through the city on her way to Paris. It bears the inscription *"Lemire, sculpteur à la fabrique de Niederwiller."*

SAVY, HONORÉ, a manufacturer of Marseilles, 1750. In 1777, on the visit of the future Louis XVIII., he was authorized to call his fabrique "Manufacture de Monsieur Frère du Roi." His mark was a fleur-de-lis. M 195.

SAVONA, Italy. The manufacture of faïences at Savona, a small coast town a few miles west of Genoa—or, to be more exact, at Abissola, a village at the city gates—began at the end of the sixteenth century, and rapidly became of considerable importance—a fact due principally to the purely commercial character of its products, which were sold at a much less price than the most common majolicas of Urbino and Faenza, and also to the proximity of Genoa, whence they were exported in great quantities. The earlier Savona faïences are generally decorated with figure subjects, in camaieu blue, that are not without a certain charm despite incorrectness in drawing. Later figures gave place to landscapes, then to flowers. They are fre-

quently marked with the city arms, or with an S under a star. The star is sometimes accompanied with the initials of the decorator or potter without the S. Some faïences are marked with a sun with or without the letters G. S. This mark is believed to be that of a family of potters of the name of Salomini. In the latter half of the eighteenth century Jacques Borelli, whose name is found on faïences of Marseilles, and who belonged to a well-known family of potters, seems to have had a fabrique at Savona. Several pieces are marked "Giacomo Borelly," and a large vase in camaieu green as follows: "Jacques Borelly, Savona, 1779, September 24." M 196.

SAYREVILLE, New Jersey. A stoneware factory using the South Amboy clay was started in 1802 by the Prices.

SAZERAT, L., Limoges. A china manufacturer who has achieved considerable local renown and whose wares are not unfamiliar in this country. The body is fine and hard and the glaze pure and liquid—qualities not always obtainable. M 197.

SCEAUX, Seine. The manufactory of Sceaux was founded about 1750, under the protection of the Duchess of Maine, and placed later under that of the Duke of Penthievre, Grand Admiral of France. More than those of any other fabrique the products of Sceaux most closely resemble porcelain, not only in the care given their manufacture, but in the perfection and delicacy of the decoration. It was later directed by Chapelle, Demonstrator of Chemistry, and member of the Academy of Sciences, and later by Richard Glot, Esquire, and Grand Master of the King's Lodges, who was at the same time one of the most skilful ornamental sculptors of his time. Under his direction were produced charming faïences of fine paste enriched with modelings and delicate decorative reliefs of consummate taste, representing figures, flowers, birds and arabesques enriched with gold. Glot relinquished the management of the manufactory to Antonio Cabaret in 1794, and from that time the products lost their artistic merit and degenerated into the usual faïences. At first Sceaux marked with the letters S. P. (Sceaux-Penthievre), alone or accompanied by the anchor of the Grand Admiral, and later with the word "Sceaux" with or without the anchor. M 206.

SCHAAF, CARL, Zell, successor to J. F. Lenz, who established the business in 1807. China of fair quality is made. The trademark is a shield across which are the initials J. F. L. and sometimes an oblong with the word "Zell." M 198.

SCHAGEN, CORNELIUS VAN, potter at Delft in 1694. The Museum of Cluny has a small puzzle jug of his decorated in camaieu blue, marked "C. V. S."

SCHIE, DIRCK JANSZ VAN, master potter of Delft in 1697. He is known by the large milk pots in camaieu blue bearing his signature —D. V. Schie, 1729.

SCHLAKENWALD, Austria. A hard paste factory was established here in 1800 or thereabouts. Good painted services were produced marked with an S in capital or script.

SCHLESTADT (Alsace). There is a widespread tradition in Germany that a potter of Schlestadt who died in 1283, but whose name has not been preserved, invented plumbiferous glaze in Europe. The facts do not bear out the tradition, as there are known specimens of glazed pottery found in France and Italy dating from the twelfth and even the eleventh centuries. The tradition rests only on the following passage from the *Annales dominicarum* of Colmar, who, in relating the events of the year 1283, says: *"Obiit figulus Slezlstadt qui primus in Alsatia vitro vas afictilia vestievat."* The most this passage proves is that the potter whom it mentions was the first in Alsace to make glazed potteries, which art he learned, perhaps, in France, perhaps in Italy.

SCHMIDER, GEORGE, Hornberg (Black Forest). Ornamental goods of very good quality and design painted in underglaze in well defined colors. The ornament is usually a graceful scroll and have frequently a motto or inscription.

SCHMELZER & GERICKE, Althaldensbleu. China manufacturers established in 1865. They employ about 700 workpeople, and are an enterprising and progressive house. M 199.

SCHMIDT. There are several German and Austrian china manufacturers of this name, the principal ones being Albert Schmidt, of Walterhausen, established in 1863; Gebruder Schmidt, of Gersweiler, established in 1847, and H. Schmidt, of Freywalden, established in 1842. M 200, 201, 202.

SCHOONHOVEN, Lysbet or Bettje van, a woman potter of Delft in 1702, who for some years was proprietor of "The Claw." Some pieces of very clever workmanship bear her initials—B. V. S., 1702.

SCHRAMBERG, Würtemberg. A pottery here early in this century made copies of Wedgwood cream ware, both plain and decorated.

SCHRETZHEIM, near Elvangen, Germany. At the château of the Favorite, near Baden, are several pieces of a service in faïence decorated with such subjects as a ham, the head of a wild boar, etc., attributed to the factory founded at Schretzheim, about 1620, by a potter named Wintergurst.

SCRIVENER, R. G., & Co., Shelton, Staffordshire. Manufacturers of china. Established in 1870. M 203.

SCHWARZ, J. VON, Nuremberg, a manufacturer of fine majolica, whose artistic treatment has done much to restore the disrepute into which majolica had fallen. Some of his color schemes are equally beautiful and original, the colors, often of technical difficulty, realized with a brilliancy truly wonderful. Dr. Richard Lindhurst is the director. M 207.

SCODELLE. Small dishes with a wide, flat brim and sunk center, usually painted with a figure of Cupid, hearts tied by ribbon or pierced by arrows, or by joined hands and similar devices. These dishes filled with sweetmeats it was the fashion for Italian gallants to present to ladies, and they are similar to the *amatorii* pieces previously described.

SCOTT. There was an earthenware manufacturer of this name at Southwick, Sunderland, in 1800.

SCRATCHED BLUE WARE. The beautiful salt glaze ware made in Staffordshire was sometimes disfigured by scratching on the surface of the ware, with a pointed tool, rough and unmeaning designs. The lines thus made were powdered with zaffre or smalt, a kind of glass colored with cobalt, used instead of the more expensive oxide of cobalt. Jugs and mugs of this description often bear dates and inscriptions, the latter generally referring to elections or other public events. They usually date about the middle of the last century.

SEBRING POTTERY COMPANY, East Liverpool, O. This manufactory was founded in the fall of 1887 as a two-kiln plant for white granite. This house is a good exemplification of the possibilities of an earthenware manufactory in the United States, as in a period of ten years the business has so extended as to necessitate the employment of eighteen kilns. The ware has considerably improved in quality, and semi-porcelain is now being manufactured in place of white granite. M 204.

SEEGER, JOSEPH, a painter of the Niederwiller factory.

SEGER CONES. Dr. H. Seger, Germany's greatest ceramic chemist, produced for the use of potters a series of cones which fuse at a given heat, thus enabling the firemen to learn exactly the temperature of the kiln. These cones melt down at heats varying from 1150° to 2180° centigrade. His work in pottery recently translated into English is the most learned treatise on the science of pottery published since the works of Brongniart, and will for many years be the standard of reference on all ceramic technicalities and practically invaluable to the student and manufacturer.

SEGORIA, Spain. Martin Vargis has a pottery here producing earthenware of good quality, and majolica. In the latter some strik-

ing shapes are made. Moorish and arabesque ornament predominate in the larger pieces, and the employment of a brilliant crimson greatly enhances their appearance. Of less merit are the pieces of bizarre form, such as straw hats made into flower holders, elephants with castles, etc.

SEIDJI. The Japanese name for their imitation of the Chinese celadon. It is decorated with designs graved in the clay, and has been made at Hizen since 1580.

SEIFU YOHEI. A Japanese manufacturer at Kioto.

SEIJI KAISHA. A Japanese manufacturer of Arita (Hizen). The fine porcelains for the Imperial Court are made by him.

SEINIE LA. A manufactory of hard porcelain was established under this name at St. Yrieix about 1764 by the Marquis de St. Aulais and the Comte de la Seinie. Its principal production was white ware for the use of the Paris *chambrelans,* but it also issued some boldly painted porcelain.

SELTZMAN, HANS. A manufacturer of porcelain stoves at Oberdorf. On one of them is recorded that he was mayor of Oberdorf in 1514.

SEMI-PORCELAIN. A fine earthenware body enriched with kaolin. Whilst retaining the wearing qualities of white granite, it has none of its objectionable qualities of weight and thickness. The title is, however, much abused, and a good deal of ware made both here and abroad is so stamped which would be more properly designated as C. C.

SENATE. The only bon-mot ascribed to George Washington alludes to the Senate as "The delicate saucer in which the tea is poured to cool." The sentence occurs in a letter to Jefferson.

SEPTFONTAINES (Luxemburg). The brothers Boch, faïence makers at Audun-le-Teche, solicited the 25th of June, 1765, of the government of the Low Country the authority to establish a faïence fabrique in the suburbs of Luxemburg, at Septfontaines. This being granted, they settled there in 1767. In 1795 Pierre Joseph Boch became sole proprietor of the manufactory, which his descendants are still operating to-day. Vases and pieces of services were made there in elegant shapes, of excellent faïence, with fine, very white body, simply decorated with flowers with stems of a peculiar type, imitated from Chantilly, and with filets traced in a beautiful cobalt blue. An artist named Dalle painted there about 1784 on faïence plaques, producing veritable little pictures of views of villas and varied subjects which he copied from engravings. There are also statuettes and groups that offer more than one point of resemblance

to the *pâte tendre* of Sèvres, and which are properly due to Italian workmen. These bisques, which are very rare, appear to have been as trials of a manufacture that was not pursued. The manufactory of Septfontaines is to-day renowned for its paving tiles.

SETO WARE. Manufactured at a village called Seto, Owari, Japan. Its origin is of great antiquity, and cannot now be ascertained. It is alluded to in the ceremonial record of the period Yengi, compiled in 927. Kato-Shirozayemon, or Kato-Shiroyemon, who went to China in 1223 for five years, upon his return eventually settled at Seto, having discovered good clay at a place called Oba-ga-futokoro. Previous to his visit to China, Kato-Shirozayemon had been engaged at Agatsu-mura in making a pottery known as Horadashite, which had been much admired by the tea drinkers; but it was greatly inferior to what he afterwards produced. His best work was in tea utensils, which, however, were not real porcelain, but a kind of stoneware distinguished in Japan by the name of ishi-yaki. That they were highly valued is evidenced by the fact that in the time of Taiko-Hideyoshi one of his tea bowls sold for over a thousand dollars, and even now his work is considered as Dai-mei-Butou, meaning "most valuable thing." His name has been abbreviated to Toshiro, his other name being Shiun kei. The ware made by him is called Ko-Seto. His descendants until the fourth generation assumed the same name, and their work is distinguished by prefixing the number of the generation. The ware made by the second Toshiro is called simply by his name, and is not equal to that of the third Toshiro. This third Toshiro is called Ninagawa Tojiro, and his work is known under the name of Mannaka-Kobutsu. The fourth was Tosaburo. In 1801 Kato Tamikichi went to Arita, in Hizen, where he married the daughter of a porcelain manufacturer established there. He remained for four years for the purpose of studying porcelain making, and then returned to the province of Owari, where he succeeded in making porcelain with blue painting under the glaze, and known as Sometsuke. Since this time the trade has continued to increase. The prominent makers of the present day are Kawamoto Hansuke and Kawamoto Maisukichi (*q. v.*).

SÈVRES. The royal manufactory of Sèvres, for so many years the glory of France, the admiration of the world and the despair of its competitors, has exercised, perhaps a more dominant influence on European ceramics than any other institution. The extravagant plaything of a line of kings, it has yet served as a school in which the French potter was assisted in his experiments, and where the germ of artistic feeling was encouraged and developed. And if

"Ichabod" is written o'er its portals there remains a memory which will exist as long as life lasts. Briefly, its history is as follows: Two brothers named Dubois, employed in the manufactory at St. Cloud, and afterwards at Chantilly, from which they were expelled for bad conduct in the year 1740, succeeded in interesting the Marquis Orry de Fulvy, brother of the Controller-General of France, in a scheme to re-establish under his direction a porcelain manufactory. The success of the Meissen factory made the moment an opportune one, and Orry de Fulvy obtained from the king permission to use the riding school of the Château de Vincennes and some apartments near by as a manufactory. After several years of costly experiments, to which the king had personally contributed $1,975, the brothers Dubois left Vincennes in disgrace, their want of skill and bad conduct being responsible for the fruitless attempts made. There had for some time been employed at the factory an honest and intelligent man named Gravant, and he offered to continue the experiments, and although De Fulvy was much discouraged at the failure of the first attempt, he had the courage to agree to his proposition. This courage was rewarded by the success of the new manager, and in 1745 they were able to show specimens of sufficient merit to insure the ultimate success of the undertaking. A company was formed, composed principally of *fermiers-généraux*—that is, financiers to whom for a given sum the right of levying certain taxes was farmed out—the capital being divided into twenty-one shares, and amounting to about $18,000. This was afterwards increased to about $50,000. In addition to this the king gave to the company, extra to the money advanced to the brothers Dubois, 40,000 livres in 1747; 30,000 livres in 1748, and an equal amount in 1749, making his total contribution over $20,000. An order in council, dated July 24, 1745, formally acknowledged the constitution of the new company, and protected it for thirty years by the grant of an exclusive privilege. Hellot, the learned director of the Academy of Science, was attached to the manufactory in 1746, at the king's expense, and his superintendence, particularly of the chemical experiments, powerfully contributed to its success. The experiments and trials were continued for a few years, and it was three years later before an important work of sufficient merit to present to the queen was produced. This vase has not been traced, but it is described in the memoirs of the Duc de Luynes, who states that it was of white and surrounded by three figures, and that in the vase was a bouquet of flowers containing 480 blossoms. The whole stood about three feet in height. So satisfied were all concerned at this evidence of what might be expected from the new

factory that the young Dauphine sent a similar vase to her father, Frederick Augustus, King of Poland and Elector of Saxony, in order to show him that her adopted country could produce china equal to that of Meissen. Most of the Vincennes china up to this period (1749) had been white, the decoration consisting mostly of flowers modeled and painted naturally. The first year they were sold the sales exceeded by five times that of other combined productions. The expense had, however, been very great, and the capital was nearly exhausted; nor did the output in the two years following come up to the expectations of the promoters. About 100 workmen were employed, and in addition were Hellot, the scientific director; Duplessis, the artistic director, goldsmith to the king, who supplied the shapes; and Mathian, formerly an enamel painter, who was soon succeeded by Bachelier, "a man of originality, taste and learning, who rendered immense service to the industrial art of the latter end of the eighteenth century, and to whom the most perfect productions of Sèvres are due." Gravant manufactured the paste, the production of which was no longer a secret. Notwithstanding this galaxy of talent, the losses in firing averaged more than half of the pieces manufactured. This paste was of a complex character, and was composed of sand of Fontainebleau, saltpetre, sea-salt, soda, alum, gypsum, or parings of alabaster. These ingredients were mixed together, and placed in an oven in a layer of considerable thickness, where, after being fired for at least fifty hours, they formed a perfectly white frit or vitrified paste. This, having been crushed, was mixed with Argenteuil marl in the proportion of nine pounds of frit to three of marl, and a paste was thus obtained which was kneaded by machine for about three weeks; it was then put to dry in troughs, pressed by cylinders, sifted

SÈVRES VASE.

and melted, and made plastic with soap and boiling water. The glaze required just as much care. It consisted of sand of Fontainebleau, litharge, salts of soda, silex and potash. All these were crushed and mixed together, and were then melted in crucibles in which they were transformed into a kind of crystal, which, being pulverized and wetted, formed an enamel. This glaze was poured over the pieces, not the pieces dipped in the glaze, and in order to fix the glaze more firmly to the biscuit it was mixed with vinegar the moment it was applied. This then was soft porcelain, a kind of vitrification of very fine and close texture, whose unglazed parts are so smooth as to be velvety to the touch. One of its distinctive features is the incorporation of the colors in the enamel—an impossibility in hard porcelain. The Marquise de Pompadour, the supreme authority in matters of art at this time, had, with other members of the king's house, interested herself in the manufactory, and porcelain had become fashionable. As before stated, the secret of the paste had become known, and rival manufacturers made every effort to learn the manufacturing, decorating and gilding processes of the Vincennes factory. This caused M. de Fulvy to obtain an order prohibiting strangers from visiting the works, and also a decree of the Royal Council which imposed a fine of 3,000 livres on any one employing a workman who had left Vincennes. The Marquis de Fulvy died in 1751, and this necessitated a reconstruction of the company, which was effected in 1753, the privilege being renewed for twelve years only. The king took one-third the shares, and the secrets of the company became vested in him. The direction was intrusted to Boileau. Falconet, sculptor of the day, had charge of the modeling, while the head painter was a man of talent, named Genest, who was placed under the direction of Bachelier. The king gave the works his efficient patronage, and authorized it to assume the title of "Manufacture Royale des Porcelaines de France," and to mark with his monogram the pieces which it henceforth manufactured. The factory now demanded increased accommodation, and Sèvres was selected, its position between Paris and Versailles being advantageous as being near the usual residence of the king. The new manufactory was formally installed there in 1756, and continued to occupy the buildings until 1877, when it was transferred to the new buildings in the park of St. Cloud, near Rue de Sèvres. The old manufactory since 1882 has been used as a ladies' seminary. Besides the flowers previously mentioned the Sèvres manufactory in its early period produced the beautiful bleu de roi and the pink ground called Rose Pompadour and often erroneously called Rose du Barry. After

the transfer to Sèvres the manufacture was considerably increased, and had reached such a degree of perfection that while France in 1745 had to go to Saxony for all its fine china, in the space of fifteen years it was justified in preferring the home product, and commenced to export it to other countries, where it was eagerly purchased. Notwithstanding this prosperity, the shareholders for some reason became dissatisfied, and the company was dissolved in 1759. The king refunded to them the amount of their shares, and became sole proprietor, granting to the manufactory a subsidy of 8,000 livres a month. Boileau was retained in his post as director. While soft porcelain was all that could be desired from an artistic point of view for domestic purposes, it was not to be compared with Meissen or Oriental china. The Sèvres manufactory, established chiefly with a view to nullify foreign competition, eagerly accepted the offer of two runaway German workmen—Busch and Stadelmeyer—to disclose the secret of the Meissen production. After prolonged and costly experiments they were discharged, their process depending almost entirely on the employment of materials not found in France, and which would have had to be imported at great expense. In 1761, Hannong, of Strasburg, made a similar proposal, which was rejected. Men of science, such as Macquer, a chemist, who succeeded Hellot at the manufactory, were of the opinion that kaolin existed in France, and the opinion proved correct, for April 26, 1760, Odolant Desnos, a physician of Alençon, informed Macquer that kaolin had been discovered at Hestre. Unfortunately, the porcelain made with that kaolin was gray and rather coarse, and the experiments had to be discontinued. They were resumed about 1764 by the Count de Brancas-Lauraguais (*q. v.*). In 1768 the magnificent beds of kaolin at St. Yrieix, near Limoges, were discovered by Madame Darnet (*q. v.*). A piece of that kaolin has been preserved in the Museum at Sèvres, having been sent to Macquer by the Archbishop of Bordeaux, together with a little enameled statuette of the infant Bacchus, which he had made with a portion of the kaolin. This discovery enabled the manufactory to realize its most ambitious views, though, unfortunately, Boileau, who had devoted so much skill and energy to it, was not to reap the benefit of the discovery. He died in 1773, and as a proof of his ability, if one was wanting, left in the coffers the sum of 300,000 livres, and credits and stock to a like amount. All this accrued capital, sad to relate, was in the next six years squandered by his successor, Pareut, who was ultimately sent to prison for reckless management. He was succeeded by Regnier, former sub-director, and under his able management the manufac-

ture of important works was commenced—such as the magnificent vases now in the galleries of the Louvre and those which adorned the palace of St. Cloud before the war of 1870. From 1769 hard porcelain daily acquired greater importance, and was gradually substituted for soft porcelain. Although in 1789 Sèvres had no rival, its products commanding the admiration of all Europe, the suppression of the privileges under which it had grown, the competition of private enterprises, the bribing away of its best workmen, the financial embarrassments of the treasury, and the difficulty of collecting the book debts, placed it in a critical condition, and it was proposed to sell the manufactory in order to pay its debts. Louis XVI., however, resolved to keep it, ordering the expenses and staff to be reduced. However, in May, 1791, the National Assembly decided that the manufactory was not to be included in the national property, but was chargeable to the king's civil list. After the overthrow of the monarchy the convention decided that the manufactory, being an institution of which France was justly proud, should be considered a national establishment, and placed under the supervision of Agriculture et Beaux Arts in the Ministère de l'Intérieur. During the whole of the Revolutionary period the situation was often extremely critical. It was with difficulty that the few remaining workmen could be paid their wages. Lotteries were resorted to, with china vases, etc., as prizes, and an appeal had even to be made for rations, such as grain and provisions, to the government stores. Arrears consequently resulted, and these were of such an extent that they were not cleared off until 1808. Under the Directory the administration was vested in Salmon, Hettlinger & Mayer, who occupied his position until 1800, when the illustrious Alexandre Brongniart was appointed director. The productions up to this time—that is, during the reigns of Louis XV. and XVI.—had secured for Sèvres a European reputation, and many exceptionally fine pieces were made. Falconet, the sculptor, had produced his celebrated Bathers and Les Amours. Oudry had won renown by his hunting scenes, and the charming bisque statuettes for which such sculptors as Pajois, Clodion, La Rue and others supplied models had been produced. Queen Victoria's collection contains some splendid examples of medium-sized vases of this period. Painted plaques for inlaying in cabinets, table tops of matchless beauty, table services and plates with rich and varied decorations were also made. Perhaps the most remarkable service was made for the Empress of Russia, Catherine II., which cost no less than 245,00 livres. These were all in *pâte tendre*, and it seems regrettable that Brongniart should decide to dis-

continue its manufacture. But under his splendid directorship Sèvres entered on a new era. He introduced wise reforms, and set the example of disinterestedness by himself proposing to reduce his emoluments from 6,000 to 3,000 francs. He succeeded in putting in order the affairs of the manufactory, and made it self-supporting until the year 1804, when it became crown property, and was managed for the emperor, who provided the funds by a yearly subsidy. This has been uninterruptedly maintained, though in 1830 and 1848 efforts were made to suppress it. Brongniart was at the head of the manufactory for a period of forty-seven years, undisturbed by successive governments, who all acknowledged his honesty and ability. In 1823 he organized the unique ceramic museum at Sèvres, Riocreux being appointed keeper, who continued at his post for forty-eight years. The present keeper is the eminent ceramic authority and author, Mr. Edward Garnier. Brongniart died in 1847, the crowning glory of his life being the writing of his '*Traité des Arts Céramiques*," and was succeeded by Ebelman, who promised to make a worthy successor, but he prematurely died in 1852. Victor Regnault was then appointed director, and continued at his post until the war of 1870, resigning shortly afterward. He was succeeded by Louis Robert, head of the artistic department, and the exhibitions of 1874 and 1878 testified to the vigorous, intelligent and artistic impulsion he had given to the manufactory. He died January 13, 1882, and was succeeded by M. Lauth. Mr. Theo. Deck was director from 1887 to 1891, and was succeeded by M. Chaplain. When Brongniart took the reins of office he sold at a considerable sacrifice all the stock of soft porcelain, which was bought mostly by decorators and sold as genuine Sèvres. He considerably improved the manufacturing processes, and vases nearly eight feet high were produced. These were painted by the most able painters of the manufactory with subjects intended to glorify the chief events in the life of Napoleon I. Rich and sumptuous services, life-size busts of the emperor and empress, tables on which were painted portraits of marshals or views

BRONGNIART.

of the imperial palaces—every piece was intended to commemorate the emperor's victories. Under the Restoration the style remained unchanged, at least during the first years of that government. The services were rather overloaded with ornament, and sought to represent a group of ideas, such as the "Industrial Arts," the "Birds of America," etc. It was then that were manufactured those rectangular plaques measuring between three and four feet in length—triumphs of manufacturing skill, and on which artists of unrivaled ability executed copies of paintings of great masters, which are the pride of the Sèvres manufactory. In 1852 the shapes and decorations were considerably modified, the paintings no longer covering the whole surface of the vase or plate, but showing the pure glaze of the china. About the same time a new element of decoration, devised by Louis Robert, the chief of the painters' atelier, was introduced—the beautiful process known as *pâte-sur-pâte* (*q. v.*) (See also Solon.) In 1884 a new kind of porcelain with a kaolinic base and a soft glaze was introduced, which decorators claim to be a distinct advance. Architectural and other stoneware has also received quite an impetus from the work effected in the Sèvres laboratories. Of late years Sèvres has existed, and that is about all that can be said. The year 1894 showed a deficit of 105,617 francs. Designed not only as an academy, but as a workshop, the workmen work only as officials; they are rarely dismissed, and are influenced by the knowledge that if there is a deficit the State will pay it. In 1897 M. Chaplain, the art director, resigned in disgust, and an inquiry into the commercial and artistic depreciation of Sèvres was ordered. The marks of Sèvres are extremely varied, and it is needless to say have been extensively imitated and forged. These forgeries are often difficult to detect, so well are they executed, and it requires a thorough knowledge of the whole history of Sèvres to positively determine whether certain pieces are genuine or not. The high price commanded for the Sèvres *pâte tendre* has been an incentive to the production of these spurious pieces. Some are so easily recognizable as not to require notice, and if those who purchase them are satisfied there is no more to be said. There can be little commiseration for the purchaser of a tawdry plate bearing the name "C. H. Dreux" underneath a crown and surrounded by a rayed circle, together with the name of one of the royal residences, as such pieces were made expressly for royal use; and if afterwards thrown on the market commanded a hundred times more than the price a modern dealer asks for this "real Sèvres." One rule will hold good. All Sèvres ware since 1848, with the exception of the year 1878, has been marked in green

under the glaze with the year of manufacture prefixed with an S (22-23). If this is sold in white this mark is scratched through on a wheel. Pieces decorated only in gold are marked with the initials R. F., surrounded by the words "Dore a Sèvres" with the year date underneath the monogram. From 1753 to 1776 the crossed L's (1) was used, with the addition of a letter to indicate the year. Thus the two L's and the letter C indicate 1775. When this series was exhausted double letters were commenced (2) and were continued to RR. Therefore two L's enclosing OO would indicate 1790 as the year of manufacture. It may be assumed that pieces bearing the interlaced L's without any initial were made at Vincennes before 1753. From 1793 to 1800, owing to the change of government, the Republican monogram, R. F. (4, 5), was substituted for the two L's, and this was accompanied in its varying form by the word "Sèvres" in script. Nearly all the marks from 1753 to 1800 were accompanied by the signs of the decorators. Thus the cross L's enclosing the letter D and accompanied by a crescent indicate the ware was made in 1756 and painted by the landscape and bird painter Ledoux. The monogram R. F. was abandoned in 1800 and the word "Sèvres" alone remained. In 1801 the use of letters or signs indicating the year was resumed according to the following table:

T9—1801	A—1806	10—1810	qz—1814
X—1802	7—1807	oz—1811	gn—1815
||—1803	8—1808	doz—1812	sz—1816
≒—1804	9—1809	tz—1813	ds—1817
-||—1805			

From 1804 to 1809 to the above signs were added the words "M. Imp'le de Sèvres" (5). In 1810 was substituted the imperial eagle printed in red (6), accompanied by the words "Manufacture Imperiale, Sèvres." Under the Restoration the two L's with the fleur-de-lis, the word "Sèvres" and the two last figures of the year (7), were used again. Under Charles X. the mark was two interlaced Cs with or without the fleur-de-lis (8 to 11). From 1830 to 1834 a circular mark was used bearing in the center the word "Sèvres," surmounted by a star and the year mark 12). From 1834 the monogram of Louis Philippe and the royal crown, the word Sèvres, and the date in full (13, 14). Pieces intended for the royal residences, as above stated, were marked "C. H. Dreux" (15). In 1848 the Republican monogram was adopted (16), surmounting the letter S and the two last figures of the year. Under the Second Empire and until 1854 (17), the mark consisted of the spread eagle, the

letter S and the last two figures of the year. Under Napoleon III. (18) the mark was the letter N underneath a crown and the year

in figures. In 1871-2 the old stamp with the monogram of the French Republic was used (19). The present mark consists of a circular stamp and a double line enclosing an R and an F interlaced, with the words "Decore à Sèvres" (20) or "Dore à Sèvres" and the date.

SEWELL, SEWELLS & DONKEN, SEWELLS & Co. These names are all found on earthenware made at St. Anthony's, near Newcastle-on-Tyne, and date between 1775 and 1825.

SFORZA FAMILY. This influential Italian family was one of the many who by their purse and influence gave a great impetus to Italian ceramic art in the fifteenth century. When they acquired the lordship of Pesaro they instituted a pottery there, and in 1486 and 1508 they issued edicts prohibiting the importation of earthenware into Pesaro. The first of these measures was commemorated by a dish bearing the portraits of Giovanni Sforza and Camilla, his father's widow. Under the patronage of this ducal house the manufacture considerably improved, and attained some celebrity.

SGRAFFIATI, Sgraffiato, or graffite. The incised ware of the Italians, and used by them from a very early period, examples of a coarse kind dating from the twelfth and thirteenth centuries. The ware is covered with a slip or engobe, which is then scratched through with a tool, showing the color of the ware beneath against the superimposed white ground. The process has been used from the most primitive times, but it remained for the Italians of the fifteenth century to dignify it as an art.

SHAW, ANTHONY & Co., Longport, Staffordshire. An old-established manufacturer of earthenware. They were one of the first, if not the first, to use decalcomanie prints on English earthenware. Anthony Shaw was succeeded by his son, Edward, who died about two years ago. Under his management the works deteriorated greatly and were finally closed for two years and were then rented to Wilkinsons.

SHAW, RALPH, Burslem. A patent was granted to him in 1732 for chocolate ware, which had a lining of white, the outside being coated with alternate coats of brown and white, scratched in with lines and flowers. The invention was applied to salt glazed stoneware. Occasion arose to test the validity of the patent, when he was defeated, as it was proved that Astbury had used the same process. He was so chagrined at his defeat that he left the country and went to France, probably to Montereau. He was the inventor of the slip kiln and also of a method of placing ware which led to the introduction of the stilts and cockspurs of to-day. He produced some remarkable pieces of red or chocolate ware, coated with white clay, and decorated by scratching through the white layer and revealing the body beneath.

SHELTON. A township midway between Stoke-upon-Trent and Hanley, where are situated many important manufactories. The old Twyford Works stood near to the site of the present church. The Cauldon Works (T. C. Brown-Westhead, Moore & Co.), those of Messrs. Ridgway, R. G. Scrivener & Co., Adams & Bromley,

Wardle & Co. are among the present-day manufacturers situated there. Thos. Miles was making stoneware there in 1685. It was here that the New Hall Pottery settled after their removal from Tunstall.

SHIRAISHI, Smida, Tokio. A present-day Japanese manufacturer of porcelain.

SHORE, JOSEPH, of Worcester, founded a small pottery at Railshead Creek, Isleworth, in 1760. Another and later proprietor was Goulding. The occurrence of the initials S & G on some well-modeled pieces of terra-cotta similar to those usually assigned to Isleworth seems to point to a partnership between the two, though there is no other evidence known of its having existed.

SHORTHOSE & HEATH were potters in Longport, Staffordshire, at the close of the last century. They principally manufactured printed earthenware.

SHRINKAGE. In all plastic clay water is present in two conditions, that which is mixed with the clay to produce plasticity and that which is chemically combined in the clay, and is only removed by the fire. Their expulsion is caused first by artificial heat for the removal of the mechanically mixed water, and commences at all temperatures above freezing point. Second, by firing at a temperature of from 550° to 750°, which produces a chemical reaction. A piece of plastic clay newly formed, immediately it is exposed to the air begins to dry, and consequently to shrink, for plastic clay is virtually a mass of clay particles suspended in water, the water holding the particles apart and preserving their distance. When the water evaporates the particles begin to approach each other as their separating medium is removed; in other words, it begins to shrink. This shrinkage takes place first on the surface and as the water disappears that from the interior flows to replace it, provided that the process is sufficiently slow to enable the capillary canals to carry their supplies at a rate fast enough to keep the whole body shrinking uniformly. But if the air is hot and dry and the surface water dries more quickly than the little canals can supply it, the piece is liable to crack. It is, therefore, evident that shrinkage begins as soon as the piece begins to dry and continues until all the mechanically mixed water is expelled. There is a pause between this artificial drying and the firing, and the ware meanwhile has been absorbing hydroscopic-water, which is gradually expelled as the kiln attains any degree of heat. The formula of kaolin (china clay) is: Al_2O_3; $2SiO_2$; $2H_2O$, or, expressed in percentages: 39.2 per cent. Al_2O_3 (alumina); 46.1 per cent. SiO_2 (silica); 14.7 per cent. H_2O (water). This latter constitutes what is

called the water of combination and is expelled at a temperature of from 500° to 750°. A chemical change then takes place, for there being no remaining water to supply the cells, the piece of ware becomes a network of minute cells and a greater heat is required to weld these into a solid mass and complete the shrinkage. This in the case of an earthenware body is reached at a temperature of about 900°, and it is then that incipient vitrification is accomplished. In the case of china and stoneware complete vitrification must take place and this is reached at a temperature of from 1,400° to 1,500°, accomplishing, of course, a further shrinkage. It is easy, therefore, to see that to produce the same size piece in both china and earthenware, the mold for the latter must be smaller than for the former.

SHUBEI, of Seto, Owari. A present-day manufacturer of Japanese blue and white porcelain.

SICILY. The Saracens introduced the manufacture of pottery similar to that made in Spain in 827. They embellished the Mosque of Palermo with tiles like those of Alhambra. In the fourteenth century Moorish works were founded at Calato Girone (*q. v.*).

SIENA, Tuscany. There is in the South Kensington Museum a collection of tiles from the Palace of Pettrucci, dating from the beginning of the sixteenth century, decorated with chimeras, birds, dragons, etc., painted in colors on a white ground. They are attributed, but without any positive proof, to the manufactory of this town. The only piece actually recognizable of the manufactory of this period is a dish signed by Benedetto. In the eighteenth century the manufactories of Siena were again in activity, but they only produced wares of mediocre character. Among the painters whose names are frequently found on the faïences of this period are Bartolomes Terenzio, in 1727; Barotolemes Terchi; Ferdinando Maria Campani, surnamed, it would seem, the Raphael of majolica, of whom a dish dated 1733, and representing "God Creating the Stars," after Raphael, is found in the British Museum.

SILICIOUS GLAZE. A glaze formed by fusing sand with either soda or potash. It is capable of receiving colors without losing its transparency.

SILVANO, FRANCESCO, had a botega at Urbino at which Xanto worked in 1541, as proved by the signature on a plate representing the storming of Goleta.

SIMPSON, WILLIAM. The first mention of stoneware in England occurs in 1581 in a petition for "full power and onlie license to provyde, transport, and bring into this realm drinking stone pottes," stating that he would "as much as in him lieth, drawe the making

of such like pottes into some decayed town within this realm, whereby many hundred poore men may be sett at work." It is not recorded whether he found his decayed town and found employment for "many hundred poore men" or not.

SIMPSON, THOMAS. An excellent flower painter at the Minton China Works, where he produced some very fine pieces.

SIMPSON, RALPH, was a potter at Burslem in 1710. His name is found on a cradle painted in slip, as also on a dish with the figures of William and Mary. There were three Simpsons, all potters at Burslem about this date.

SINCENNY (Aisne). Among the numerous fabriques that emanated from Rouen, that of Sincenny should be placed in the foremost rank, its products being for a long time confounded with those of Rouen, which they frequently equaled. This manufactory was founded about 1733 by M. de Fayard, Lord of Sincenny, who conferred the directorship upon Pierre Pelleve, of Rouen. The latter brought with him workmen and artists who introduced to the new establishment the methods of manufacture and decoration in use at Rouen. At this period the products of Sincenny and Rouen so closely resemble one another that they are distinguished only by certain subtle differences—the enamel is slightly bluish and the red delicately glazed at Sincenny, while at Rouen it was almost always dull. Under the influence of Dominique Pelleve, probably a son of Pierre Pelleve, the decoration was soon transformed, and evinced more originality. The pseudo-Chinese decoration of Guillebaud was well imitated at Sincenny, while they added personages in brilliant robes of a beautiful citron yellow, which may be taken as the peculiarity of the second period of Sincenny faience, the same color being found in their colored statuettes of the same epoch. Later, about 1775, under the direction of Chambron, who introduced painters from Lorraine, the manufactory was transformed anew, and imitated successfully the enamel decorations that Strasburg had made the fashion. The faïences of this third period are difficult to recognize because they have been so perfectly imitated. The faïences of Sincenny frequently bear an S roughly traced in blue, or the abbreviated name of the town. A vase in the Museum of Rheims, with raised enamel in places, decorated with two ovoïd medallions on which are painted in camaieu blue on one side Louis XI., and on the other Mirabeau, bear in raised enamel on the two cartouches the following inscriptions: "Manufacture de Lepage," "Sincenny, a Louis Didier, G." This manufactory of Lepage has, so far as we know, never been mentioned; and as to the vase itself, it is purely

an individual work that cannot be taken to represent a type. M 208.

SILVER LUSTER. Thomas Wolfe, of Stoke-upon-Trent, is credited with having first produced silver luster about the year 1776.

SING-I, the elder, and Sing-eul, the younger, were Chinese potters of the tenth century. Sing-i was the more celebrated, and his porcelains went down to fame as Koyao, signifying "porcelain of the elder brother." His most highly esteemed work was vases of rice color or pale blue, whose enamel was perfect. Sing-eul also produced work for fame, and his pieces were also blue, both pale and dark.

SLIP DECORATED WARE. Slip is clay diluted with water to about the consistency of cream. Designs are produced by pouring the slip through a small pipe in running lines or small drops. The process is a very old one, and was used by the Romans. In Staffordshire a little vessel fitted with various-sized quills was used, the running of the slip being controlled by a little air-hole pierced on the upper part, the stopping of this hole with the thumb being all that was necessary to stop the flow of slip. The process was in vogue about the middle of the seventeenth century—tygs, pots and dishes being ornamented with figures, flowers, animals and ornaments. Large quantities were produced at Wrotham, in Kent (*q. v.*), and other places. In Staffordshire, Ralph and Thomas Toft are the names best known in connection with this slip decorated ware—so much so that they are often described by the generic name of Toft dishes. Rude as was the art, and imperfect the designs, it is not to be despised, for it is the prototype of the exquisite *pâte-sur-pâte* work of to-day. (See also Posset Pots.)

SMEARING is produced by the evaporation of certain glazes in closed saggars. In earthenware kilns where common glazes are employed upon the ware in the saggars, if these last be closed and the heat be sufficient, other biscuit ware in the saggars might be slightly covered with a glaze coating, or be smeared by the evaporation from the glazes. Certain compositions may also be placed in the bottom of the closed saggars and by their evaporation the ware in them is smeared. The compositions employed are various, and salt is sometimes added; for example, a compound of 67 parts of common salt, 28 parts potash and 5 of oxide of lead is used.

SMITH, WM., & CO., were earthenware manufacturers at Stockton-on-Tees early in the present century.

SOAPSTONE, or steatite. A silicate of magnesia containing in one hundred parts about sixty-two of silica, thirty-three of magnesia and five of water. It was largely used in the first body made by the Worcester Porcelain Company.

SOLON, LOUIS MARC. Born at Montauban, France, in 1835. Early in life he entered the studio of M. Lecoq de Boisbaudran, and early developed a strong liking for decorative art. Among his fellow-students the etching needle was much used to express their thoughts, and his first original production—a series of etchings of mixed figures and ornament—attracted the attention of M. Nicolle, the art director of Sèvres, and procured for him the offer of permanent employment at the imperial factory. A Chinese vase at the Sèvres Museum, decorated with white relief on a celadon ground, had led to experiments being made; and the employment offered him was especially in connection with *pâte-sur-pâte* painting. "It was charmed," says M. Solon, "to be asked to join my efforts to the few artists then engaged in bringing the process to perfection. The contrast produced by the sharpness of the outlines and the soft and mellow tints of the transparent reliefs made

JUBILEE VASE. M. L. SOLON.

me most anxious to try some figure subjects." The engagement then begun lasted twelve years. In 1870 M. Solon went to England and immediately entered the employment of Messrs. Minton under the best possible conditions for devoting his time and efforts to the art which is most congenial to him. Here he continued to produce a series of the most delightful designs of poetic and original conception, never under any conditions repeating a design, there apparently being no end to his fertile imagination. That there should not be a certain amount of repetition is the more remarkable when we consider that he limits his fancy to nymphs and cupids almost exclusively. Some quaint or graceful conceit is always expressed, sometimes of a humorous character, sometimes embodying the more serious thoughts of this poet painter, who has, by his gifts and charming skill, ennobled ceramic art and so closely associated his name with *pâte-sur-pâte* that it is impossible to think of the one without the other presenting itself. He married Miss Arnoux, daughter of M. Leon Arnoux, the veteran ceramist and for many years art director at Minton's. In addition to his work as a painter, M. Solon has given us the best picture

VASE BY SOLON.

of the old English potter ever presented, in his charmingly written book, "The Art of the Old English Potter"; and delving far into forgotten ceramic lore, has written some exhaustive papers which have added much to our knowledge of murrhine vases, noble buccaros, old celadon, and other half-forgotten ceramics.

SOLON, LEON, son of the above, seems to have inherited his father's talent, and the few designs we have seen executed by him for Messrs. Minton are of extreme originality and display a taste in the arrangement and adaptation of ornament to the shape which gives promise of a brilliant future. He succeeded M. Arnoux as art director at Minton's.

SOLOBRIN, JEROME. An Italian potter who before 1502 established a faïence factory at Amboise, in France.

SOMETSUKI. Japanese ware decorated in blue on the body before glazing is so termed.

SONOROUS STONE. Chinese symbol used on ware intended for judges and magistrates. The sonorous stone was hung above their door or above the temple gate, to be struck by those seeking admittance. (See Honorific Marks.)

SOQUI. A decorator from Sèvres who went to the Cookworthy Works at Plymouth, 1760.

SOUFFLÉ. A Chinese decoration effected by inserting color in a tube, one end of which is covered with gauze, and when blown upon the piece to be decorated the color falls in minute air-balls which break into little circles.

SOUTH AMBOY, NEW JERSEY. Large deposits of clay are found here, and although known to the Revolutionary soldiers, who used it in place of pipe clay, the deposit was not fully developed until about 1855.

SOUROUX. A potter of Paris, established in 1773, whose successor was Ollivier.

SOUTH AMERICA. Long before the days of the Aztecs in the north and the Peruvians under the Incas in the south there existed an aboriginal race whose pottery has come down to us. Not the least remarkable thing in it is its similarity in form and even in symbols to the course taken in ceramic art in Europe, Asia and Africa. When Peruvian civilization began we have no means of ascertaining. It has been conjectured to be as remote a date as 2500 B. C., its first period extending to the second century of our era, followed by a long interval of internecine struggle, ended by the advent of Inca-Rocca, the first of the Incas. Then came Pizarro with his Spanish followers in 1531 and swept everything back into

chaos. Both science and geology seem to confirm this assumption of a past so remote that the Incas seem but as children of yesterday. Professor Orton says they combine to prove that Soxaka and Chimborazo have looked down upon a civilization far more ancient than that of the Incas, and perhaps coeval with the flint flakes of Cornwall and the shell mounds of Denmark, and possibly are as venerable as the lake dwellings of Geneva. On the coast of Ecuador pottery has been found below a marine deposit several feet in thickness. The natural evolution by which the earth was submerged, the covering of the marine deposit, and the consequent upheaval of the land to its former level must have taken centuries to accomplish, and go to prove that the Peruvians were accustomed to work in clay at an age so remote that the mind hardly grasps its full extent. The best

PERUVIAN POTTERY.

articles of pottery were taken from tombs—a parallel to the practice in ancient Egypt, in mysterious Etruria, among the ancient British, and in imperial Rome. This pottery shows the greatest disparity, as does their architecture, and exhibits diametrically opposite types. Its age is purely conjectural. Water vessels predominate, often with a bifurcated handle which also served for a spout. The shapes were of the most varied form, sometimes in the form of a human head, representing a high type; some were in the shape of fish, of birds and of animals. Everything in nature was copied, grotesqued and exaggerated, and imagination ran riot. One of these vessels in the Smithsonian Institute represents the kneeling figures of a man eating and drinking and joined to a water bottle. The chief colors used in decoration were red, black and brown. The pieces seem to be hand-made for the most part, though molds were sparingly used. The designs were often graved in the paste. These Peruvian potters

seem to have known all about atmospheric pressure, Dr. Le Plongeon having in his collection a piece that demonstrates this. It represents a double-headed bird. The vessel has to be filled through a hole in the bottom, and yet in turning it over not a drop is spilled; but the liquid would readily flow out when the jar was simply inclined. Vessels with holes through which the air escapes when forced out by the liquid poured into the vessel cause a sound to issue from the holes similar to the cry of the animal represented. Alice de la Plongeon, speaking of these extraordinary vessels, describes one as decorated with two monkeys embracing each other, which when filled with water gave out a sound like the screeching of these animals; another decorated with a bird would emit bird-like notes; a mountain cat on one jar would mew; snakes coiled around each other would hiss. The most curious was the figure of an old woman. When the jar was in use her sobs became audible and tears trickled down her cheeks. Those wonderful productions known as "Noble Buccaros" (*q. v.*), which emitted and transferred to their contents an incomparable perfume, were made largely in the interior of Peru, far removed from what civilization existed. In Brazil huge covered jars were used for the reception of the mummies of their chiefs. To-day a good underglazed terra-cotta is produced, distinctly Greek in shape and ornamentation, together with vases of red clay with medallion reliefs and faces in light brown clay. Water vessels predominate, from those of small size to the immense *talhas*, which hold from ten to fifteen gallons.

SPAANDONCH, THOMAS. Master potter. Established at Delft in 1764 at the Sign of "The Double Flagon," from which he adopted the initial letters as the mark of his products, which, while still being of fine manufacture, already marked the decadence of Delft—D S K.

SPAIN. The greatest antiquity in connection with pottery must be ascribed to Valencia. Pliny stating that at Saguntum, now called Murviedro, there were twelve hundred potteries. The remains found there are all of Roman character, of which the most important is the red Samian ware. Of the period intervening between the downfall of Roman civilization and the occupation by the Saracens in the eighth century of the Iberian Peninsula we known nothing, and what knowledge we have, to as late a date as the sixteenth century is purely conjectural. The pottery produced at this period has been already referred to under the heading Hispano-Moresque and Saracen. With the conquest of the Moors the ceramic art quickly declined. In 1760 Charles III. founded the china works in the garden of Buen Retiro at Madrid, the products of which were very

similar to those of Capo di Monte, from which manufactory the king took most of the workmen and artists (see Buen Retiro). A second manufactory was established at Moncloa, near Madrid, in 1827. A manufactory was founded at Alcora, near Valencia, in 1727 by the Count d'Aranda, with the aid of workmen and artists from Moustiers. The productions generally resembled those of Moustiers, the lace border identified with that fabrique being reproduced, generally in connection with religious or mythological subjects. Olery, the Moustiers artist, also worked at Alcora, as did also the artist Ferrer Vicente. To-day the ceramic productions of Spain do not call for especial mention. At Seville, Messrs. Pickman and Sandeman & McDougal have extensive earthenware works, and at Triana, near that city, Messrs. Mensaques have made a more or less successful attempt to reproduce Moorish tiles. In Catalonia, Florensa makes china of good quality. There is a sanitary factory at Valladolid; Mr. Juan Falco has works at Valdemorillo, and majolica and earthenware are made at Segovia (*q. v.*). Valencia with only a slight modern break has a continuous ceramic history from the Roman epoch, and has now two potteries, one producing colored glazed tiles, the other imitations of Hispano-Moresque copper luster on dark ivory body, an Etruscan ware and parti-colored majolica. Not far away, at Marisses, there are a number of factories making Azulejos, reproductions of Moorish tiles. At Hostafranchs, Province of Barcelona, there is a porcelain factory making ware of a very good quality, the clay and glazes both being procured from Limoges. At Triana, near Seville, very good reproductions of Hispano-Arabe are made by Vuida (widow) de Gomez.

SPARKES, MRS. An artist at the Doulton Lambeth factory. A tile piece by this artist representing the "Departure of the Pilgrim Fathers" was a prominent part of the Doulton display at the Philadelphia Centennial Exhibition. Two hundred and fifty-two tiles were used to complete the panel, the composition and painting of which were justly admired.

SPEELER & TAYLOR were the pioneer potters of Trenton, N. J. They had both been in the employ of Messrs. Goodwin, of East Liverpool, Ohio, but in 1852 they started a yellow and Rockingham ware factory at Trenton. In 1856 they had also made white granite. though the firm had changed to Speeler & Bloor. An attempt was also made to make Parian and mojolica, but was not altogether successful. About 1859 Mr. Speeler sold out to John F. Houdayer, who was succeeded by Taylor & Goodwin, the business eventually (1875) becoming the property of Isaac Davis.

SPERL, the widow, had a manufactory of hard porcelain at Baden from 1753 to 1778.

SPITTOONS. Spittoons of similar shape and size of Chinese porcelain have also been found in Persia. Marco Polo, in describing the customs of the Great Khan, says: "I must not omit to tell you of the orderly way in which the Khan's barons and others conduct themselves in coming to his presence. In the first place, within half a mile of where he is, out of reverence for his exalted majesty, everybody preserves a mien of the greatest meekness and quiet, so that no noise of shrill voices or loud talk shall be heard, and every one of the chiefs and nobles carries always with him a handsome little vessel to spit in whilst he remains in the hall of audience—for no one dare spit on the floor—and when he hath spitten he covers it up and puts it aside." From this it seems that we have still something to learn from the ancient Persians.

SPRIGGED WARE. Ware decorated with small reliefs made in a mold and attached to the ware by means of slip. The process is a very old one, but china tea ware of a cheap description is still made in this way, the relief generally being in blue or lavender.

SPRIMONT, NICHOLAS, succeeded Gouyn as manager of the Chelsea China Works. He was probably of Flemish extraction, the name being that of an old family of the Duchy of Limbour, a district where some of the finest stoneware of the sixteenth century was made. A fragment of a stoneware jug bearing the Sprimont arms was discovered a few years ago at Bouffioulx, near Liège, where some of the Sprimont family settled as early as 1600. (See also Chelsea.)

SPRINGER & Co., Elbogen. Established in 1815 and now the largest factory in Austria. Both the clay and coal used in the manufactory are found in the immediate neighborhood. Probably the largest oven in the world is in use here, being twenty feet in diameter and three stories high. The first floor is used for glost and the second and third for biscuit ware, the glost fire being the hardest. A good quality of china is manufactured, very extensive in its variety, the production giving employment to about one thousand workmen. M 209.

STAFFORDSHIRE. From the district known as "The Potteries" (*q. v.*) the pottery trade has of late years considerably extended, and on the borders of Derbyshire an industry has grown of considerable proportions. Where a few years ago nothing but the cheapest of stoneware for domestic purposes was made, we are now supplied with ornamental goods relying principally on their beauty of form and the color and richness of the glazing. Messrs. Ault and Messrs. Tooth & Co. have been the leaders in the movement, and from both houses some charming pieces are issued of pure and graceful shape and harmonious coloring.

STAFFORDSHIRE FIGURES. Earthenware figures, oftentimes imitations of the porcelain productions of Chelsea and other factories, more or less artistically colored, were made in The Potteries by Ralph Wood, grandfather of Enoch Wood; Wedgwood, Voyez, Neale, Enoch Wood, Bott, Wilson, Lakin & Poole, and others. The list is nearly a chronological one. Original subjects were not wanting, some of them being well-modeled specimens and exhibiting careful coloring. The best-known piece by Ralph Wood is the group of "The Vicar and Moses," the humor of the piece being well rendered. It was reproduced by his successors for many years, but the coloring grew stronger and the modeling weaker until its merits were all lost. Another example of his work is a bust of Washington. Wedgwood probably discontinued the production of these glazed and enameled figures when the greater adaptability of jasper and basalts became obvious to him. There are, however, numerous marked specimens of his work, some of considerable size. J. Voyez was responsible for much of the modeling, and he was probably employed both by Ralph Wood and Wedgwood. In addition to statuettes, groups of figures, busts and plaques with reliefs, and a good many animals were made by the Staffordshire potters, both in enameled ware and cream color. With the introduction of Parian the manufacture of these figures ceased, or the modeling and coloring became so debased as to have no claim to artistic merit, and the production

was limited to "chimney ornaments" of woolly lambs and dogs, impossible shepherds and no less impossible warriors in blue on scarlet and white horses.

STAMNOS. A Greek vessel or open-mouthed jar with two handles, the body inclined to be oval, and curving into a narrow base. They were frequently painted with red figures.

STAMPED WARE. The Elers Brothers and other succeeding Staffordshire potters, instead of using for their relief ornamentation designs made in a mold, stamped the design on the piece itself with small metal seals.

STANNIFEROUS. A glaze or enamel made opaque by the addition of tin. It may be either colorless, as the enamel of Della Robbia, Nevers, Rouen and Delft, or colored, as the enamels of Longwy, Colinot and Parville. It was known to the Egyptians, and from them passed to the Assyrians. It was employed by the Persians, and also the Arabs, who carried the secret of its manufacture to Europe. Here it was lost, only to be resurrected and perfected by Luca della Robbia in the fifteenth century.

STATES, ADAM, Stonington, R. I. Stoneware was manufactured by him about the end of the last century.

STEELE, AARON. A painter employed by Josiah Wedgwood. In 1784 he signed articles of agreement for three years to paint in London, and was afterward transferred to Etruria, working for the firm until his death, which was some time later than 1845. Miss Meteyard, in "A Group of Englishmen," says of him: "His touch was delicate, his taste elegant, and his aerial figures are often supremely graceful. With such instruction as could now be procured in schools of modern art, Aaron Steel would have probably risen into something much higher than a mere decorator of reproductions from the antique."

STEELE, DANIEL, Burslem, made wares resembling jasper in 1802.

STEELE, THOMAS. A fruit and flower painter of the Derby China Works, and afterward with Davenports, of Longport.

STEEN, JAN. A painter of figures at Delft, A. D. 1650.

STEINER & ADLER, Falkenau. Manufacturers of china. Established 1889. M 210.

STEPHENS, W. When Champion purchased the Cookworthy patent he is known to have taken seven apprentices as china painters. Henry Bone, afterward known as a miniature painter, was the first, and Stephens the second.

STEUBENVILLE, Ohio. The town is named after Baron Steuben, of Revolutionary fame, and was originally laid off in lots by James

Ross and Bezeleel Wells. Here are the works of the Steubenville Pottery Company, which were organized in the fall of 1879 for the manufacture of white granite. From the original one biscuit and one glost kiln the capacity has been increased to three biscuit, four glost and six decorating kilns. The range of manufacture has been increased, and the body gradually and considerably improved. Mr. W. B. Donaldson is the president, J. Dunbar vice-president, and Alfred Day secretary. Mr. Day is also the secretary and keeps the historical records of the American Potters' Association.

STEVENSON, A., was at the Cobridge works from 1815 to 1820. He made a good quality of earthenware, many of his American historical designs being much appreciated by collectors of the present day. He was succeeded by James Clews.

STEVENSON, R., was also an earthenware manufacturer at Cobridge, and he, too, produced some American designs. One has a view of Castle Garden, New York. (See Historical Earthenware.)

STEVENSON & DALE are stated by Chaffers to have started the Cobridge works, until recently occupied by the Brownfield Guild Pottery, in 1750.

STOCKTON-ON-TEES. Messrs. Ainsworth Brothers and the Clarence Potteries Company have earthenware manufactories here, and Codling & Bainbridge make brown ware.

STOKE-UPON-TRENT, Staffordshire. There are nearly half a hundred towns and villages in England named Stoke, each with its distinguishing suffix. The Trent serves that purpose for Stoke, one of the group of towns constituting "The Potteries." Rising in the moorland a dozen miles away, it is polluted in its short course by coal mine and factory, and is but a slender stream—such an one as Dr. Johnson, when in Scotland, immediately jumped over to show an Englishman's contempt for a Scotch river. The town itself has no points of interest, with the exception of the large manufactories of Mintons, Copelands, the tile works of Minton, Hollins & Co., and other potteries. The population in 1881 was 24,027. (See Potteries, The.)

STONE CHINA. An earthenware body of great density, variously described as "opaque china," "ironstone china," and "white granite," which latter is, perhaps, its best appellation. It varies only slightly from ordinary earthenware, has not even a vitrified fracture, same as stoneware, nor any of the translucency of porcelain, and has no separate classification.

STONIER, JOHN. Mr. Stonier was born in The Potteries, and, after traveling for a large firm there, set up in business as a china

and glass dealer in Liverpool in connection with Mr. Livingstone, the firm being Livingstone & Stonier. They were contemporary with William Litherland, and both these representative Liverpool houses became associated with the manufacture of pottery, Mr. Litherland being one of the promoters of the present Crown Derby Works, and Mr. Stonier joining the firm of Powell & Bishop, Hanley. This was in 1878. Mr. Stonier was of genial disposition, and earned the respect of all who knew him. He remained a member of the firm until his death, February 25, 1897.

STONEWARE. Earthenware is usually divided into two classifications, soft and hard—the former with a non-vitrified, the latter with a vitrified fracture. Of the latter the *grès* of Germany and the Lambeth Doulton represent the earlier and later developments. It is seldom glazed otherwise than with salt. (See Salt Glaze.) The Chinese made stoneware covered with porcelain. Stoneware was made at Beauvais, in France, in the thirteenth century, but the manufacture did not assume importance in Europe until about the commencement of the fifteenth century, and Germany is usually credited with instituting the fabrication. The name of the beautiful Jacqueline of Bavaria (*q. v.*) is associated with its manufacture by a curious tradition. The common brown German pots commonly called graybeards, from the bearded heads molded on the neck, date from the fifteenth century. Fine ware was made in the sixteenth century, including the so-called "Grès de Flandres" (*q. v.*). From Germany the art passed to Holland, and from thence to England. Dwight, of Fulham, and the Elers Brothers produced excellent stoneware, that of the former having probably never been surpassed. (See Dwight, Elers, Doulton, Simpson, etc.) Stoneware was made in this country at Norwich, Conn., as early as 1796.

STRALSUND (Pomerania). This manufactory, founded about 1731 by Jean Paskowitz, one of the best of the Rorstrand workmen, assumed considerable importance under the direction of Ehrenreich. A number of remarkable pieces were produced, generally decorated in camaieu blue, which have been classed as Swedish productions because of the general resemblance of their marks to those of the ware of Stockholm and Marieberg. The Stralsund mark is, however, easily recognizable because it bears a portion of the city arms surrounded by a little crown and accompanied by the letter E, the initial of the director Ehrenreich, director of the fabrique. As to the figures, they read like those of the Swedish fabriques—20. 7. 68—that is to say, the twentieth day of the seventh month of the year 1768 (July 20, 1768). The initials of the decorators usually accom-

pany the mark. Present productions are similar to those of Rorstrand. (See Geise.) M 211.

STRASBURG (Alsace). About 1709 Charles Hannong founded at Strasburg a manufactory where he produced the first faïence painted on the enamel in imitation of porcelain. In the beginning the products were chiefly pipes and stoves made in imitation of those of Germany and Switzerland. Later, in 1721, Hannong took as a partner a workman from Meissen named Wackenfeld, who had unsuccessfully tried to establish in Strasbourg a manufactory of porcelain; and in conjunction with him Hannong manufactured both porcelain and faïence, in which he succeeded so well that in 1724 he established another fabrique at Haguenau, a small town a few leagues from Strasburg. In 1732 Charles Hannong retired, leaving his two manufactories to his sons, of whom Paul, the more intelligent and efficient, soon became sole proprietor of the Strasburg fabrique. Paul Hannong (see Hannong) gave attention to the development of porcelain, while at the same time using on faïence the porcelain process of decoration. Owing to the jealousy of the Royal Manufactory of Vincennes, later Sèvres, he was forced to demolish his ovens and move to the Palatinate. His sons, first Pierre, and later Joseph, were also forced to give up their manufacturing, ruined as they were by the imposition of the *Ferme Royale*, by which their product was taxed as merchandise from reputed foreign provinces. We refer to this subject again to show that when Joseph Hannong was forced to flee into exile, as his father was before him, and to die in want and misery in Munich, the decadence of the Strasburg manufactory began; and after languishing a few years the collapse was final, despite all attempts to revive it. For a period of fifty years the Hannongs made faïences that give them just title to a place in the history of ceramic industry. They created a school. The Strasburg faïences are distinguished by the beauty and purity of the enamel, the elegance and variety of their forms, and the charming brilliance of their colorings. Their decorations consist chiefly of floral bouquets of fresh colors, sometimes outlined in black, and often modeled with a delicacy and exactitude that the best porcelain artist might envy. Besides the table services Strasburg manufactured a quantity of faïences that bear witness to the skill and profound decorative sentiment of its artists—clocks, vases, etc., etc., with reliefs, sometimes enriched with gold, and of remarkable execution. The faïences of Strasburg are nearly always marked with the Hannongs' monogram, sometimes accompanied with figures that were probably intended to assist in

their assortment. (For marks, see Hannong). The style of decoration originated at Strasburg was promptly imitated in almost all of the faïence manufactories. Most of the fabriques, while employing the Hannong processes, created a particular style of decoration of their own; but there were many others, among them those of Luneville, St. Amand and La Rochelle, that simply copied servilely the Strasburg bouquets; and it is only by the greatest attention that the products of these manufactories can be distinguished from one another. In the imitations, however, especially in those of La Rochelle, the drawing is less flowing, the outlines heavier, and the colorings coarser and less pure, especially the carmines, which lack the fresh delicacy of those of Strasburg. M 213.

STRAUS, L., & SONS. Messrs. Straus & Sons are proprietors of the New York and Rudolstadt Pottery (*q. v.*), and have also a china

LAZARUS STRAUS.

manufactory at Limoges. In 1865 Mr. Lazarus Straus, who had been a merchant in Georgia, started in the crockery business in New York in conjunction with his son Isidor. In 1873 Nathan Straus and his son-in-law, Lazarus Kohns, were admitted as partners. In 1881 Mr. Oscar Straus was admitted to the firm, and in 1892 Mr. Lee Kohns became a partner. Mr. Lazarus Straus died January 14,

1898. From the first the firm was prosperous, and gradually built up a large business, acquiring the confidence of merchants throughout the whole of the United States. As mere dealers in pottery, however extensive their ramifications, Messrs. Straus would have had no claim to notice in these pages, but they extended their sphere of usefulness by acquiring and working several manufactories, the best known of which is the Rudolstadt Pottery, to which we are indebted for so many beautiful works of art. Mr. Oscar Straus, under the Cleveland administration, was our representative at Constantinople, and the most flattering comment on his ability and usefulness was his reappointment by President McKinley. Mr. Straus has devoted a considerable portion of his time to early American history, and his life of Roger Williams and other works make quite a valuable contribution to our national history.

STRATFORD-ON-AVON. Alfred Espley has a small factory on the Birmingham Road.

STREHLA, Germany. In one of the churches of this city there is a fine pulpit of pottery, the inscription on it stating that it was made by Michael Melchoir Tatzen in 1568. A life-size figure of Moses supports the pulpit with his right arm, the left one holding the table of the law. Above the door Delilah is represented cutting off the hair of Samson, and below Samson is carrying off the gates of Gaza. The four evangelists are grouped around the foot, surrounded with green foliage. Eight plaques have relief subjects—the Creation, Abraham, the Nativity, etc.

STROOM, PAULUS VAN DER. Maker of faïences in Delft in 1725. A number of pieces in brilliant color are marked P. V. D. S. Jacquemart notes one of the marks accompanied by the date 1754.

STROOM, PIETER VAN DER. Master faïence maker. Established at Delft in 1693 at the sign of the Pot of Gilded Flowers, of which he retained proprietorship for barely two years, though he continued to direct it.

STRUNZ, JOHANN HEINRICH. The last of the Nuremberg potters, about the end of the eighteenth century.

STUBBS, JOSEPH, founded the Dalehall Works in 1790, and owned them up to 1829. He made an excellent earthenware body, and his blue-printed plates with American designs are well known and appreciated by collectors.

STUBBS & KENT, Longport, made similar ware to above, and probably this was for some time the style of the firm founded by Joseph Stubbs, though Jewett does not mention them, stating that Joseph Stubbs was succeeded by Mayers.

SUMINOSUKE, FUKAMI. A distinguished porcelain maker of Arita, who revived the manufacture of Hirato ware (*q. v.*).

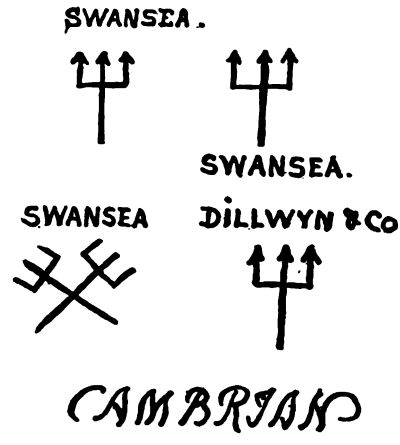
SUNDERLAND, England. The north of England had several potteries making plaited strap dessert baskets, statuettes well modeled, but spoiled in the coloring, and printed earthenware, during the period 1775-1825. Moore & Co., Scott, Dixon, Austin & Co., and J. Phillips, of the Hylton Pottery, were some of the principal manufacturers. To-day large quantities of stoneware, earthenware and glass are manufactured there.

SUN-DRIED POTTERY. Primitive potters the world over hardened their pottery by exposure to the sun until accident or experience taught them the value of fire. We find it in Egyptian, Assyrian, Greek, Peruvian, Pueblo, Mound Builders and early English.

SUZUKI, YASUBEI, established a kiln at Ota, near Yokohama, for the purpose of making an imitation of Satsuma ware. He employed a Kiyomidzu porcelain maker named Kozan, who worked with so much success that the original Satsuma lost its value. It is from this factory, as well as from the Awata factory, near Kioto, that has issued the greatest quantity of pottery commonly sold as Satsuma ware.

SWANSEA. The beautiful china made here was undoubtedly due to the genius of Billingsley, the painter of Derby, of Worcester, and of Coalport, and the manufacturer of Nantgarw and Pinxton. The deftly painted roses of Billingsley occur both on Nantgarw and Swansea china, but certain embossed patterns in low relief and uncolored are almost characteristic of Swansea. The Swansea works were conducted by Mr. L. W. Dillwyn, who employed as a draughtsman Mr. W. W. Young, the designer of those charming

flower sprays, so beautiful and faithful in their transcript from natural models, which so much enhanced the fame of the Swansea china. China was only made here from 1814 to 1817, and three years after the works were sold to John Rose, of Coalport. The Swansea works were founded prior to 1790, at which date they were under the management of Mr. G. Haynes, and were called the Cambrian Pottery. Under his management the works were considerably enlarged, the products consisting of earthenware similar to that made in Staffordshire, and mantelpiece figures in enamel white and cream-colored ware. These have often a chocolate or orange line on the plinth. In 1802 the works passed into the hands of L. W. Dillwyn, who, by the employment of W. W. Young, the manufacture of black basaltes, imitations of Etruscan vases in red and black, unglazed buff wares with figures in relief, and finally by the introduction of the beautiful china as before stated, gave the works an importance rivaling many of the prominent Staffordshire houses. The marks on earthenware varied considerably, sometimes being "Cambrian Pottery," either impressed or printed, and the others as shown in the sketch. The trident, without accompaniment, was the mark on china. When the manufacture ceased in 1817 it is probable that a portion of the works were continued until 1820 by Bevington, the manager, as biscuit porcelains are known marked Bevington & Co., Swansea, with the initials I. W. (See Nantgarw.)



Societa Ceramica, Milan. The largest earthenware manufactory of the present day in Italy.

Swain & Co., Huttensteinach. Established 1854. The crossed pipes mark is used on Delft pieces. M 214.

Swinton, near Rotherham. A pottery of common earthenware was founded here in 1745 by Mr. Edward Butler, which in 1765 passed into the hands of William Malpass. who had as partners John Brameld and his son William. In 1778 Thomas Bingley became the principal proprietor, trading under the style of Thomas Bingley

& Co. The two-handled drinking cup illustrated is an example of the printed ware made about that time, it bearing the date of 1788. About this time the Greens of Leeds became partners, and the productions of the two potteries became almost identical. A few years later a great impetus was given to the works by the production of what was later called Rockingham ware. (See Rockingham and Cadogan.) In 1806 the firm, which had been conducted as Greens, Bingley & Co., was dissolved, and the business fell into the hands of John and William Brameld, who, with other partners, continued the works under the style of Brameld & Co. until their death. They erected additional buildings, and continued the work with great spirit. About this time cream-colored ware was extensively made, and a fine white earthenware which they termed chalk body, but which had to be abandoned on account of its costliness through losses in firing. In 1813 Mr. William Brameld died, and three of his sons entered the firm. In 1820 the manufacture of china was commenced, but the firm became embarrassed, and would probably have entirely collapsed had it not been for the financial aid offered by Earl Fitzwilliam, who was much impressed with the fine examples of china produced. In this year (1826) the works became known as the Rockingham Works, and the crest of the Fitzwilliam family was adopted as a trademark. Mr. John Wager Brameld was an excellent artist, and he and John Cresswell produced some splendid services, one of which was made for King William IV. A notable artistic success was achieved, but commercially the concern was a failure, and the works were closed in 1842. In addition to the Rockingham ware and china, a good quality of earthenware was made, the services for the White House during Jefferson's administration being made here. In earthenware also were produced many artistic pieces in the shape of pot-pourri jars and vases, among which we may particularly mention the lotus vase, which we illustrate. In china, too, many fine vases were produced, one in the possession of Earl Fitzwilliam being three feet nine inches high and painted with subjects from Don Quixote by J. W. Brameld. To show the lavishness bestowed on important pieces, the inside of the

cover of this vase is beautifully painted in panels of small landscapes alternating with Bewick's celebrated tailpieces. But the dessert set for King William IV. is the undoubted *chef d'œuvre* of the works. It cost £5,000 (about $25,000), and was first used at the coronation of Queen Victoria; and from the esteem in which it is held is only used on special state occasions.

SWEDEN. (See Marieburg and Rorstrand.)

SWITZERLAND. The ceramic productions of Switzerland are unimportant, if we except the valuable historical pottery of the lake-dwellers, who, before Rome was founded, built their huts on the piles in the lakes of Switzerland. (See Lake-Dwellers.) In the seventeenth century there were manufactories at Zurich, Schaffhausen and Winterthur, the latter being probably the most ancient, the style similar to that of Italy. The Zurich works were founded in 1763 by one of Ringlers' workmen from Hochst. They had but an ephemeral existence, and were closed in 1768. Imitations of Sèvres were for a short time made at Nyon, where a Frenchman established a workshop. To-day Messrs. de Grange, at Carouge, near Geneva, have a factory remarkably well situated for turning out goods, the waters of the Rhone supplying the power.

T

TAFT, J. S., & Co., Keene, N. H. Established in 1871. Makes fancy goods with an ivory ground and *art nouveau* decorations, and also in colored glazes. In the latter are some very good colors, notably an olive green. Most of the shapes are good, and there are attractive novelties among them, notably a small tortoise, cleverly modeled. M 215.

TAIZAN, YOHEI. A Japanese manufacturer of Awata ware. He was formerly a potter of Mizoro.

TAJIMA. Province of Japan. Earthenware has, it is claimed, been made here since A. D. 473.

TAKAHASHI, DOHACHI. A kind of Raku ware was made by him in 1840. He was one of the tea drinkers, and attempted an imitation of Raku from two kinds of clay—red and white. His works were in good taste and great demand, his porcelains especially displaying his artistic talent. The manufactory is continued by his son.

TAKATORI WARE. The factory is situated in a village called Sobara-mura, in the Province of Chikuzen, Japan, where an imitation of Chinese ware had already been made in the periods Onin and Bunmei (1467-86). The most eminent maker is said to have been Hachizo. The ware, for which a red-colored clay was used, is known as Ko-Takatori. The first glaze is rather a light brown, and is marbled by spreading over it another glaze of deep yellow or black. In the period Shoho (1644-7) a clay of light yellowish or grayish white color came into use. The glaze used for it contained a small amount of oxide of iron, and after two or three applications produced a very fine metallic luster. This particular ware is distinguished as Yenshiu Takatori, which is derived from the name of Kobori Masakatzu or Yenshiu, who was a distinguished patron of tea ceremonies, and died in 1647, who greatly admired it and encouraged its manufacture. In 1614 a priest made here for the first time statuettes representing the Chinese saint Kanzan. In 1690 Igarshi Jihei resumed the trade, and it has descended in two families of Takatori and Yama-kuchi, together with the art of manufacturing utensils for the tea ceremony, and other articles.

TALAVERA-LA-REYNA (Spain). This small place, situated near Toledo, was so renowned for its faïences in the seventeenth and eighteenth centuries that it was customary to speak in Spain of

Talavera as in England of Delft when faïence with stanniferous enamel was referred to, without regard to the fabrique from which it came. And, singularly enough, there is no manufactory whose products are less known than those of Talavera. M. Casati has devoted a brief notice to them, and notes a characteristic sufficiently distinctive to make them recognizable. It is the greenish cast of the enamel—a shade approaching water green. He cites several pieces, cups, vases, inkstands, etc., on which this green tinge is very pronounced. The decoration is somewhat analogous to that of Italian faïences. "They do not attain the same degree of artistic perfection," says M. Casati, "but they are distinguished by a broad style. These faïences are not remarkable in general for the finish of their execution, but more for the facility and spirit of it." Two pieces in M. Casati's collection are marked—the one, Josphe Albarez f"; the other "d. Joseph Rossado."

TAMBA WARE. A kind of stoneware similar to that made in Corea and in the southernmost part of China. The surface is not always plain, some parts being wrinkled and others swelled, giving it a curious appearance. Ware made here between 1520 and 1580 is called Ko-Tamba. This factory now produces a common ware with different colored enamels for the use of the lower class of Japanese.

TAMIKICHI, KATO, in 1801 went to Arita, in the Province of Hizen, Japan, where, in furtherance of his plans for studying porcelain making, he married the daughter of a china manufacturer established there. He remained for four years, and then returned to the Province of Owari, where he succeeded in making, with a clay he had found, porcelain decorated with blue under the glaze, and known as Sometsuke. Since this time the trade has continued to increase in Owari.

TAMURA, GONZAYEMON. The original manufacturer of Kutani ware in the seventeenth century, who had studied the Hizen process of porcelain making.

TAMWORTH. Terra-cotta works were established by Gibbs & Canning in 1847, the works being still continued under the same name. Terra-cotta for architectural purposes is produced in considerable quantities, and is of good quality. So-called "Della Robbia" ware, a fine terra-cotta enameled in brilliant colors, is also produced in plaques for ceilings and walls. At Wilnecote, near Tamworth, are the extensive works of George Skey & Co., who make terra-cotta of excellent workmanship, sanitary and stone ware.

TANAKA-MURA. The village of Arita, Japan, was so called.

TAN-NIU. The tenth generation of Raku makers, honored with a seal by the Prince of Kii, of the family of the Shogun.

TANZAN, SEIKAI. A present-day manufacturer of Awata ware (Japan.)

TARDESSIR, DOMENICO. A native of Faenza, who assisted in the management of the factory at Lyons, founded by a native of Pesaro named Francesco about the middle of the sixteenth century.

TAROYEMON. A manufacturer of Karatsu ware, A. D. 1690 to 1730.

TASSIE, JAMES. Born in 1735, died in 1799. Beginning as a stonecutter in the vicinity of Glasgow, Tassie devoted himself to making in clays of various colors imitations of cameos and portraits on oval medallions remarkable for the character and delicacy of their execution. Wedgwood employed him for a long time. In Sloane's Museum and various collections of portraits and plaques in enameled clays his pieces may be found, and are signed "Tassie, F."

TATLER, ELIJAH. A skilful artist for some time in the employment of Charles Cartlidge, at Greenpoint, where he produced much excellent work.

TATLER DECORATING COMPANY, Trenton, N. J. Carried on by the sons of the above, who seem to have inherited their father's talent. By their artistic taste and their care in execution they have in a few years earned for themselves an enviable reputation, and, while easily outstripping their competitors, have made a standard of excellence which, had they been manufacturers instead of decorators only, would have placed them at the head of the trade in America. Too unassuming to adopt a trademark, the public at large know little of the earnest effort to give every piece that leaves their works the impress that all the knowledge and taste they possess have been bestowed upon it. The company have not attained this position without some disappointments and much hard work; and the energy of Mr. James Lawson has been an important factor in their success.

TAVERNES (Var). This manufactory, founded about 1760 by Mr. Gaze, ceased producing in 1780. A small dish with festooned edge, now in the Sèvres Museum, of common manufacture, with enamel full of pin-holes, decorated with scattered blue flowers, badly executed, was given to the Baron Davillier at Tavernes by a great-grandson of Gaze. This faïence is marked with a rude G.

TAWARA, Japan. There is a factory here making mostly teapots, which are used in Uji, the center of the tea-cultivating district in Japan.

TAYLOR. Mr. Taylor was the director of the Birmingham School

of Art and turned his attention to pottery. He has succeeded with a leadless glaze in producing some of the most beautiful colored glazes ever made in England. Occasionally there is a little painting, generally a mere suggestion, but the glazes in themselves are sufficiently beautiful to dispense with any extraneous enhancement.

TAYLOR, WILLIAM and JAMES, were throwers at the Jersey City Pottery (1829). "It was here that the throwing and turning of earthenware upon the English principle were first performed in America," says *The Ceramic Art*. One of the brothers afterward went to Trenton and founded the firm of Taylor & Speeler.

TAYLOR, WILLIAM and GEORGE, were potters in Staffordshire making slip decorated ware early in the eighteenth century.

TAYLOR, WILLIAM W. Much of the success of Rookwood is owing to Mr. Taylor, for it was he who by his absolute faith in its future, by his indomitable perseverance, sustained and encouraged Mrs. Storer, and eventually made it the artistic and commercial success it now is.

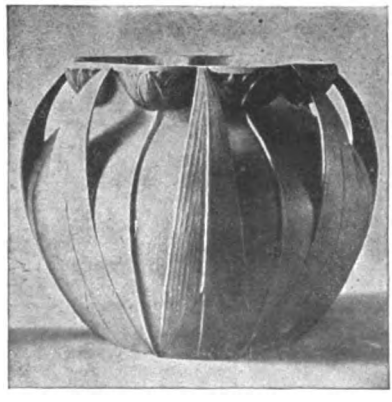
BRISTOL FIGURE, "WINTER," BY TEBO.

TEAPOTS were first made in Europe the latter part of the seventeenth century. It is not known whether they are of European or Chinese invention.

TEBO. The best statuettes made at Bristol were modeled by Tebo, and he also seems to have worked for other potteries. His pieces are sometimes marked "To." We give an illustration of one of a set of four figures representing the seasons. This is from the Schreiber collection.

TECHNOLOGY. The meaning of certain terms used in pottery from diversity of usage has become somewhat obscured, some authors using one term, some another. Porcelain and china are synonymous and apply to ware of a semi-translucent nature,

whether of natural or artificial composition. Yet the word porcelain is often used in describing various wares, from the glazed pottery of Egypt and the fine majolica of Italy to the earthenware of the present day. "Pottery" is another word to which various shades of meaning have been given, many writers, erroneously, we think, making a distinction between pottery and porcelain. Its root is the Latin word *"potum,"* a drinking vessel, and we hold that it embraces everything made of clay. Faïence is a French word, said to be derived from Faenza, and formerly meant earthenware covered with a tin glaze, but latterly has been applied to all kinds of glazed earthenware. There does not seem to be any excuse for this, and it would be preferable to restrict it to its original meaning, rather than to indiscriminately apply it to objects of earthenware whose value it fails to enhance. Majolica is another word whose original meaning has been quite lost sight of. Derived from Majorca, one of the Balearic Islands, from which place the Italians gained much of their knowledge of pottery, it was adopted by them first under the style of *mezza* majolica, to describe the slip-coated ware made in imitation of the tin-glazed ware of Majorca, and afterward as majolica when tin enamel was used in place of slip. This limited use of the word was observed to the middle of the sixteenth century, and afterwards all Italian glazed earthenware was called majolica. Its use became extended, and when Mintons produced earthenware covered with colored glazes they called it majolica, which is its present accepted definition. It was effective and cheap to produce, and soon there were a hundred Richmonds in the field; and the veriest trash both in body and manufacture was placed on the market as majolica, until the word became a reproach. The simplification of terms is very much to be desired, and we think might advantageously be reduced to:



TECO.

Pottery—Anything made of clay.

China or Porcelain—Hard and soft, both semi-translucent.

Earthenware—All glazed ware not translucent nor showing a vitrified break.

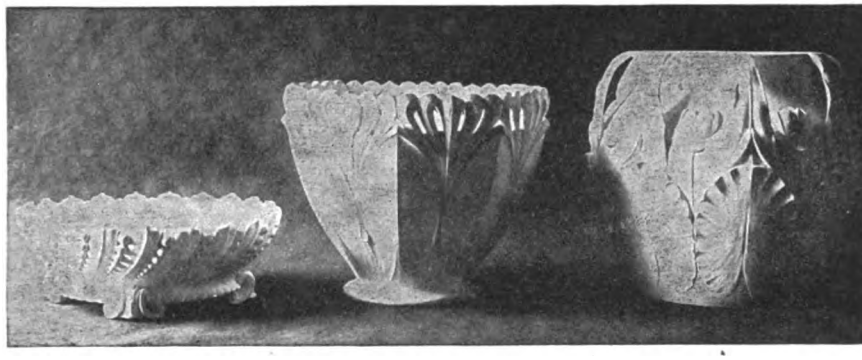
Stoneware—Earthenware showing a vitrified break.

Faïence—Earthenware with a tin enamel.

Majolica—Earthenware with colored glazes.

Biscuit—The ware before it is glazed.

TECO. This is the name given to the pottery productions of the American Terra-cotta and Ceramic Company, of Chicago. It is very similar in appearance to the Grueby ware, having the same mat ground, the colors mostly inclining to greens; but lacks some of the essentials which make Grueby what it is. An effect not found in the latter is realized in Teco in the form of a beautiful silver luster, though we are by no means sure that it adds to the value of



the mat glaze. These mat glazes, so suggestive of repose, are charming in themselves, and anything beyond a mere suggestion of relief work seems to detract from their value. Pottery is but a side issue with the company, and though experiments have been in progress since 1880, they have several times had to be abandoned owing to the pressure for the staple products of the company. The shapes are extremely varied and some of them are of mammoth size. M 216.

TEINITZ (Bohemia). Earthenware was made here in 1800 by Welby, who signed his name in a wreath.

TEHERAN, Persia. Earthenware which retains a degree of Oriental elegance, though to a very limited extent, is made here.

TELLWRIGHT. This is an old Staffordshire family, and the name is adduced as a proof that under the Saxons the making of pottery was practiced there. The name is a corruption of tilewright or potter.

TERCHI, of Bassano, was very early associated with the St. Quirico works, either having founded them for Cardinal Chargi or worked there as an artist.

TER HIMPELIN painted marine subjects at Delft about 1650.

TERRA-COTTA. Literally, "baked earth." The term is usually employed to indicate a red or buff clay of close texture and unglazed.

TERRAGLIA. A hybrid porcelain midway between earthenware and china.

TERRES DE LUNEVILLE. The statuettes by Cyffle (*q. v.*) executed in biscut were so termed.

TERVUEREN, near Brussels, Belgium. A small faïence fabrique was established in the park of the Castle of Terveren by Charles Alexander, Duke of Lorraine and of Bar, Governor-General of the Low Countries for the Empress Maria Theresa. The products of this princely manufactory, whose existence is proven only in 1767, and which ceased in 1781, after the death of the duke, were not for commerce; and there is but one specimen that can with certitude be ascribed to it—a fountain with garlands in relief, decorated with the arms of Lorraine and bouquets finely painted, that belongs to the Museum of Antiquities at Brussels, and which bears under the base the marks CCC, CP.

TEYLINGER. (See Jacqueline of Bavaria.)

THANG-KONG. A Chinese potter who lived between 736 and 1795. He was the director of the Imperial Works at King-teh-chin, and reproduced many of the ancient Chinese colors, besides inventing many admirable new ones.

THIEME, CARL, Potschapel. Many admirable pieces come from this manufactory, well designed and executed. Many of the imitation pieces of Capo de Monte ware are made here. M 216 a.

THOMAS CHINA COMPANY, Lisbon, Ohio. A four-kiln earthenware plant recently erected.

THOOFT (JOOST) & LABOUÇHÈRE, Delft. "The Porcelain Bottle," founded in 1672, and "The Bell" were the only potteries remaining in Delft in 1848, in which year "The Bell" was silenced forever. Its one remaining rival, conducted by two sisters, led a precarious existence until some time in the seventies it was purchased by Joost Thooft. He was fortunate to secure the coöperation of M. Adolf Lecomte, a professor of the Delft Polytechnic, who undertook the art direction and who is still associated with the firm. An old potter was found who had some memory of the old Delft processes, and for ten years he lingered among the workers, when he was pensioned, and his portrait executed on pottery was prepared in honor of his eightieth birthday. Mynheer Senf, one of the best workmen in the pottery, was one of his pupils. Messrs. Thooft & Labouchère have not confined their attention to copies of old Delft, but adapting the old methods to modern requirements have given to the world much excellent and original pottery, strong and virile in character, perfect in technical skill and with the highest artistic excellence. M 217.

THORWALSDEN, the Danish sculptor whose works, reproduced in terra-cotta and biscuit by the Danish potters, have been made famil-

iar and served as an art education to thousands who would have had no chance to see the originals. The fine texture of the Danish clay and the care bestowed upon the productions have made these among the choicest productions of the ceramic art.

PLAQUES OF OLD MASTERS, BY THOOFT & LABOUCHÈRE.

THOUARS. Oiron, near Thouars, was the birthplace of the famous faïence d'Oiron. There were numerous potteries in the immediate neighborhood—at Regne (1771); at Chef-Boutonne (1778); at Fontenay (1558-81), and at Ile d'Elle (1636-1742).

THOUROUT, near Brussels, Belgium. Pottery in glazed red clays,

decorated with figures and ornaments on light yellow engobe, and sometimes enriched by pastillage of varied colors, was made here. This ware is often confounded with that of the same style made at Beauvais and in the north of France. Some of them bear dates varying from 1706 to 1780.

THROWER, THROWING. Until recently the thrower was the most important workman in a pottery, but he has been superseded by a machine termed a "jigger," and this honored calling has become almost a thing of the past. While commercially this has been a great gain, artistically it is to be regretted, for it must always be a matter of regret that our pottery no longer bears the evidence of a craftsmanship as old nearly as the art itself. (See Potter's Wheel.)

THURSFIELD, RICHARD. "The Broseley establishment was founded by Mr. Richard Thursfield, of Stoke, in 1713," says *The Ceramic Art* We can find no confirmation of this statement. The Caughley works, to which the above refers, were erected, according to Jewett and other authorities, by Mr. Browne, of Caughley Hall, though but little is known of them until 1754, when they were leased by Mr. Browne to Gallimore. (See Caughley.)

TICKENHALL, Derbyshire. Pottery made of brown clay streaked with brown slip, some of it in the shape of roughly-formed heads, with the ruffs of the Elizabethan period, has been found here, and probably dates from the sixteenth century.

TILES. In the Middle Ages one of the widest-spread uses of burned clay consisted in the employment of encaustic glazed paving tiles (see Encaustic Tiles) that replaced the mosaics previously used for paving temples and palaces. It would require a volume to pass in review the thousand varied combinations of these tiles created by the ingenious caprice of skilled artisans of the fourteenth and fifteenth centuries. All that imagination could invent of decorative arrangement, figures, fantastic animals, etc., are grouped in an odd manner, forming rich carpets, of which, unfortunately, very few have remained intact. At the end of the fifteenth century the discovery of glaze with a tin base replaced the glazed with painted tiles more brilliant in color, but much less substantial, and which were soon abandoned. Urbino and Faenza, in Italy; Rouen and Lisieux, in France, and some other manufactories produced a great number of these tiles, of which the Louvre, the Museums of Sèvres, Cluny, and South Kensington possess very beautiful specimens. But if the enameled tiles were not long used for paving halls in the castles or chapels in the churches, they have always been used as an

interior or exterior wall covering for edifices in the Orient and in Spain (see Azulejos), and in our Occidental countries for the much more modest bathrooms, dairies, kitchens, and even stables. Nearly every manufactory of faïence made this sort of tiles veritable works of art that deserve to be preserved—Delft, among others, being renowned for its wall tiles, oftenest decorated in blue, and that formed by grouping veritable pictures of quite large dimensions. The articles on Encaustic Tiles, Sadler & Green, Pilkington, and Mintons give some further information on this subject, as does also that on the Low Art Tile Company. Large quantities of tiles, both for walls and pavements, are made here, principally at Trenton and Zanesville, and some notice of the latter appears under that heading. Whieldon, in Staffordshire, made salt-glaze tiles, with landscapes and animals, made from carved molds.

TITHE PIG. This group of three figures was originally made at the Derby China Works, and was copied by the Staffordshire potters the latter part of the last century. It was a popular chimney-piece ornament.

TINWORTH, GEO. Artist and modeler in clay, born at Walworth in 1843. His father was a wheelwright in a small way of business, and failed to recognize the great gift bestowed on his son, punishing him frequently whenever he detected him carving in wood. A friendly plasterer who lived near suggested to the boy to apply to the art school for admittance, and this resulted in his constant attendance there for some time, under the encouragement of the art director, Mr. Sparkes. In 1864 he entered the Royal Academy Schools, and two years later he won the distinction of exhibiting in the academy itself. This exhibit was a street scene, representing two boys fighting, with two girls interfering, and a dog adding his note to the noise by barking. During this time he was working as a wheelwright, his father having died in the meantime, and he was the only support of his mother. By the kindly offices of Mr. Sparkes he was in 1867 introduced to the Doultons, commencing work at retouching old molds, and earning a salary of thirty shillings per week. It was not long before he launched forth into more original work—modeling filters and making enlarged copies of ancient coins. Some of these attracted the attention of Mr. Ruskin, the eminent art critic. When, in pursuance of the Doulton policy, he was allowed to have his own way, he commenced a series of religious subjects which, from their excellence in thought, composition and modeling, attracted universal admiration. The story is always simply told, but told with a virile strength that appeals to the least appreciative.

These terra-cotta panels of sculptured subjects have been not inaptly termed "The Bible in Sculpture." Among the many produced by him may be mentioned "Gethsemane," "The Foot of the Cross," and "The Descent from the Cross," exhibited in the Royal Academy in 1874, and purchased by the Edinburgh Museum of Science and Art. In the following year he exhibited eight panels which were much praised, and four other panels in 1876. It would partake too much of the nature of a catalogue to follow Mr. Tinworth in his various successes, but the large vase illustrating scenes from English history, and exhibited at Chicago, will be fresh in the memory of many of our readers. Mr. Tinworth is also possessed of a fund of humor which he loves to give vent to in his work, and some charming conceits in this vein have come from his hands. In the Smithsonian Institute at Washington is a Doulton pulpit, with panels by Tinworth illustrating scenes in the life of Christ, from the offering in the Temple to the Ascension. The expression and attitude of the figures are marvelously lifelike and forcible.

TOAD MUGS. Mugs with models of frogs attached to the interior were made at Leeds and Newcastle-on-Tyne towards the end of the last century.

TOFT, THOS. A Staffordshire potter, who had a small works at Tinker's Clough, midway between Shelton and Newcastle-under-Lyme, about the middle of the seventeenth century. He made large dishes of common earthenware decorated with slip, and from the preponderance of examples bearing his name these slip dishes are often described as Toft ware. He was probably the first to attempt anything as ambitious as the human figure, but soon had numerous imitators. These huge platters, often eighteen inches across, were made of common red clay, with a wash of pipe clay on the inner surface, on which the design was laid in red slip, and the whole glazed with galena—a yellowish hue being given to the pipe-clay grounds and ornaments. The rims are usually ornamented with a trellis work of orange and brown slip, and the center adorned with a conventional flower, an animal, or a roughly-executed portrait, usually of royalty. Toft is a well-known name among Staffordshire potters, and a descendant of Thos. Toft worked for Wedgwood, who made a medallion of him.

TOFT, RALPH, was contemporary with Thos. Toft, and also executed work in slip.

TOFT, CHAS. One of the most proficient artisans the century has produced. From 1868 to 1883 he was employed at the Minton factory, and to him was entrusted the reproduction of the celebrated

faïence d'Oiron pieces, which were executed with marvelous fidelity, and which for modern-day productions realized enormous prices. He has been aptly described as "King of the Potter's Bench," and such, no doubt, he was. In 1883 he started in business for himself at the Swan works, Stoke-upon-Trent, and continued to produce this remarkable ware; but a succession of losses obliged him to relinquish the business, and he accepted an engagement with Messrs. Wedgwoods, of Etruria, who intended to continue the important work he had so successfully carried on for so long a time for Messrs. Minton. An attack of apoplexy some months later terminated fatally, he being in his sixty-first year. It is to such men as these—Toft, of the Potteries; Tinworth, of Lambeth; Avisseau, of Tours—and others, that the world is indebted for the choicest productions of the potter's art; men just as deserving of eulogy as the most prominent manufacturers in the world.

TOFT & WHEELING, Charles Street Works, Hanley. They succeeded Wm. Mellor, who founded the works in 1758. They were followed by Toft & May, and later May carried on the works alone. He was succeeded by Wm. Ridgway. (See Johnson Bros.)

TOKIO. Ware made in Arita and the province of Mino is frequently sent to Tokio to be decorated by artists there. Of the latter the most familiar are the eggshell *sake* cups, the exterior of which is covered with a minute basketwork of finely split bamboo. This basketwork is, however, not made in Tokio, the ware when painted being sent to the province of Suruga, where the basketwork is applied and the ware completed for export. Raku ware covered with lacquer is also made here by Kowaza Benshi.

TOKU-NIU. The eighth generation of Raku manufacturers.

TOMATARO, KATO, Koishekawa, Tokio. Established in 1880. His special designs are landscapes and flowers in underglaze. The mark painted in blue is the signature of one of his artists, Togioku Yen. Tomotara had two fine vases in the Paris Exhibition, quite worthy of his reputation. One was painted with roosters, the other birds on a branch. M 218.

TOME, JANSZ. The oldest authentic specimen of blue painted ware made at Delft is so signed. It is a dish painted with "The Last Judgment," a subject comprising 400 figures, and made at the factory of Herman Pietersz about 1600. Mr. Solon says the name is but a misspelling which conceals but imperfectly the British name of Tom Jones, a soldier, who is described as having been "born in England, beyond London, and who came to Holland with the English regiment commanded by Capt. Hamwout (?)."

TOOTH & Co., Bretby, near Burton-on-Trent. Manufacturers of the colored glaze ware known as Bretby ware, and which from its fine quality has rapidly risen in popular favor. M 219.

TOMBSTONES. In several of the churchyards of the Potteries—Burslem, Wolstanton, and others—there are many earthenware headstones of common brown or red clay, some having ornaments and inscriptions in relief of the same material, some in white slip, and others inlaid. The dates range from 1718 to 1767, but one is as late as 1828. There is a fine specimen in the British Museum made of coarse clay covered with white slip and glazed yellow. It has a floral design, the initials E. E., and the date 1695 incised, and the inscription "When This V C Remember Mee." A Continental firm are making tombstones in porcelain at the present day.

TORELLI is a small Florentine potter who has attained some success in the manufacture of white enameled figures of children, cupids, etc. Otherwise his work is largely an imitation of Cantagelli.

TORTOISE. The sacred tortoise of the Japanese is frequently used as a motif in the decoration of pottery. It is an emblem of longevity, and is found associated with the bamboo, fir and other objects symbolizing long life. With the exception of a broad, hairy tail it resembles the ordinary tortoise.

TORTOISESHELL WARE. This production of Whieldon and other contemporary potters differed from other parti-colored wares such as marbled, combed and agate in that instead of the decoration being formed with colored clays it was effected by coloring in the glaze. Whieldon's perforated double teapots and octagonal plates have never been surpassed and are the admiration of modern collectors and the despair of modern potters. Four-fifths of the surface are flooded with a mass of rich manganese brown color, with an irregular V-shaped pattern in light brown, and about this and elsewhere on the surface are splashes of copper green and cobalt blue. Specimens are extremely rare.

TOUR-D'AIGUES (Vaucluse). This factory, established prior to 1773 in the castle of Baron de Buni, of the Tour d'Aigues, has contributed to the Sèvres Museum a very beautiful dish in camaieu green of soft tone, decorated with a rustic scene, excellently drawn, and bearing as mark an outline drawing of the château and the inscription *"fait à la Tour Daigues."*

TOULOUSE (Haute Garonne). The existence of this manufactory is only known by a hunting bottle decorated in camaieu blue, bearing the inscription: "Laurens Basso, à Toulouza le 14a May,

1756," and by a few pieces decorated with grotesques bearing in full the word "Toulouse."

TOURNAY, Belgium. Pierre Joseph Fauquez, who already possessed a factory at St. Amand, also established one at Tournay. He died in 1741, and it then passed into the hands of his son, who, in turn, after the signing of the treaty at Aix-la-Chapelle, yielded it to Peterynck, of Lille, under whose direction it became of considerable importance. To the manufacture of faïence he added that of porcelain. Pieces not marked may easily be mistaken for those of St. Amand, which they much resemble. M 220.

TOURS, INDRE-ET-LOIRE. About 1770 Thos. Sailly established in the Faubourg St. Pierre des Corps a fabrique which, at his death in 1782, passed to his son Noel. It seems only to have produced common faïence. It was in one of the fabriques of St. Pierre des Corps that Avisseau of Tours served his apprenticeship. At St. Radegonde, near Tours, there is now a small manufactory chiefly of specialties in colored glazes—deep blues, crimson, etc., decorated with gilding and raised enamels. The shapes are chiefly Renaissance, and the decorations almost wholly so.

TOYOSUKE, the first manufacturer of Horaku ware on the Raku system, established in 1820. Latterly a production, the outside of which is covered with lacquer painting and called Toyosuke, after its inventor, has come into use. Eating and drinking utensils are made of it, but they are not used in the tea ceremonies.

TOZAN WARE. This ware is made in Himeji, in the province of Harima. The factory was founded by the family of Sakai, who were princes under the feudal system, for the purpose of imitating Arita ware. The celadon produced here is somewhat finer than that known as Nankin Celadon in China. For the last twenty-five years the works have been degenerating, and at present only a small trade in inferior wares is carried on.

TOYO-URA WARE. The factory at which this ware is produced is supposed to have been founded about 1716-35. It is situated at the foot of the hill of Toyo-ura-yama, in the province of Nagato. The trade was originally in ash bowls for use at the tea ceremonies, but is now in an inferior ware, with a white glaze, for domestic purposes.

TOZAN POTTERY, Giwon, Kioto. Decoration on the glaze in gold and various colorings. M 221.

TOZO. A Japanese potter of Matsu-moto, province of Nagato. His ancestors seven generations ago founded a kiln there on the Corean system. The productions resemble Hagi ware, and are called "Matsu-moto Hagi."

TRENTON, N. J. The history of Trenton has been told in these pages under various headings, and it is therefore unnecessary to repeat it here. Its development as a pottery center has been somewhat remarkable when we look upon what has been accomplished there and reflect that its first pottery sprang into existence in 1852. In 1879 there were nineteen potteries, with fifty-seven kilns, producing something like $2,000,000 worth of pottery per annum. Up to 1863 the products were confined to white, sanitary, yellow and Rockingham ware; but about that date the products took a much wider extension, and since then decorated goods of all kinds have been largely produced. Of late years the potteries of Ohio have divided the honors with Trenton, the growing markets of the West materially assisting in their development; but, though many of the old Trenton firms remain only as a memory, there are still a few of the old ones left, who, with some younger ones, worthily maintain the city's prestige as a ceramic center. The following chronological table will be of interest:

1852—Taylor & Speeler commenced the manufacture of Rockingham and yellow ware.

1853—Astbury & Millington. First manufacturers of sanitary ware.

1853—W. Young & Sons (now Willets) founded.

1855—Taylor & Speeler making white granite.

1859—Rhodes & Yates. The first pottery erected for the exclusive manufacture of white granite and cream color ware.

1863—Etruria Pottery built.

1863—Firm of Coxon & Co. founded.

1863—Firm of John Moses founded.

1865—John Hart Brewer became a partner in the Etruria Pottery.

1869—Mercer Pottery Company organized.

1879—Willets Manufacturing Company organized.

1879—Burroughs & Mountford founded.

1879—International Pottery Company organized.

1883—Belleek ware made.

1889—Ceramic Art Company founded.

1892—Trenton Potteries Company organized.

1893—Maddock Pottery Company organized.

TRENTON POTTERIES COMPANY. This company was organized in 1892 for the purchase of the Crescent, Delaware, Empire, Enterprise and Equitable potteries, who were all producing sanitary ware. Afterwards the Ideal Pottery was built to enable the company to

manufacture earthenware bathtubs, laundry sinks, etc. Sanitary ware continues to be the principal article of production, though dinner and toilet ware are also made.

TRENTVALE POTTERY COMPANY, East Liverpool. The only firm in America making decorated jet ware.

TRESSEMANES & VOGT, Limoges. This manufactory was founded by J. F. H. Vogt in 1852, who was succeeded in 1882 by the present firm. China of fine quality is made, with a pronounced individuality in the decorations, some of which are exceptionally good. A word of praise, too, must be given to the shapes, originality being a conspicuous feature. Their trademark is a bell on which are the letters T. & V. M 222.

TREVISO, Italy. A dish painted with "The Sermon on the Mount" has a mark stating that it was made at Treviso in 1538. Sgraffiati ware, poor in character, was made there in the last century.

TRIANA, near Seville (Spain). Azulejos (*q. v.*) and spikes for the adornment of roofs have at all times been made here. Triana has also produced common pottery with metallic luster, and the ordinary coarse faïences.

TRIPOUS, a Greek vessel standing on three feet. It was used as a warming pot.

TRIESTE. The French term for fine crackle glaze.

TSUJI KATSUZO, a descendant of Tsuji Kizayemon, is one of the distinguished Japanese potters of to-day, and is especially skilled in piercing porcelain. He also receives employment from the Imperial court.

TSUJI KIZAYEMON. About 1665 Dati, the Prince of Sandai, sent to Tokio to purchase an article made by Tsuji, which was afterwards offered to the Emperor. Since then the maker has been honored annually by an order from the court to supply the ware used in the palace, which is a very clean, translucent porcelain with cobalt decoration. The grandson of Kizayemon discovered the use of saggers.

TUCKER, WILLIAM ELLIS. About the year 1816 W. E. Tucker commenced business in Philadelphia as a decorator of pottery, and at some subsequent period which has not been clearly ascertained started the manufacture of china in conjunction with his brother Thomas. The works were at the corner of Market, Schuylkill and Front streets. It was some time prior to 1827, for we know that in that year a medal was awarded him by the Franklin Institute. It is stated, but apparently on very slender premises, that the workmen

he employed purposely spoiled his ware and did all they could to render his efforts abortive. A conspiracy of English manufacturers is even charged, but the story must be taken with much reservation. Some time before Tucker's death Judge Hemphill acquired an interest in the business, and he afterward carried on the works in conjunction with Thomas, brother of W. E. Tucker. He afterward sold out, and in 1837 Thomas was conducting the business alone, and the works were closed in the following year. The products were chiefly table ware, and, although the body and glaze were excellent, the shapes and decorations left much to be desired. Foreign competition was too keen for the infant industry, and it consequently died of public neglect.

TUNIS. The ceramic industry here dates back to a period of high antiquity, the large jars found at Pompeii having been made at Djerba, where there are still 129 small potteries at work. The trade has declined of late years, owing to the competition of the potteries of Bizerte and the environs of Tunis. The potteries of Nebeul were founded by immigrants from Djerba three or four hundred years ago, and there are still fifty-three master potters running twenty-eight kilns. Both glazed and unglazed ware is made, for the former two glazes, yellow and green, being used. The principal articles made are the jar or "goulla," and these are often ornamented with designs in brown. Water bottles, plates, lamps, wash basins and other domestic utensils, vases for flowers, etc., are also made. The sale of the goods is effected by camel loads, always of assorted kinds, Each load consists of fifty "abars," the unit is indicated by the number required to form an "abar." For instance, a strainer is of abar size, or one-fiftieth of a load, while a smaller one is a one-eighth abar, or one four hundred and eighth part of a load. The value of a load varies from about $1.25 to $2 or $3. In Tunis itself there is a bank of clay in the center of the town which is still worked by several potteries. Another branch of the industry once in a flourishing condition, but now fallen off to a considerable extent, is that of glazed paving and wall tiles introduced by the Andalusians into Italy in the early part of the eighteenth century, contemporaneously with their settlement in Tunis.

TUNSTALL, one of the towns constituting the group known as "The Potteries." The trade is principally earthenware, several important manufactories being located here. Among them may be mentioned Booths, Ltd., W. H. Grindley & Co., Pitcairns, Ltd., Alfred Meakin and Wedgwood & Co. The population is about 16,000.

Here is the United States consular office, where all invoices from the potteries are certified.

TURIN, Italy. A fabrique, of which there is no precise document known, and which is only known to have existed because of one piece bearing the inscription "*Fattu in Torino adi 1 d setebre, 1577,*" existed in France in the sixteenth century. In the seventeenth and eighteenth centuries this town possessed another manufactory, whose products, decorated in blue, in the style of Savona, are marked with the sword of Savoy, surmounted by the royal crown. A magnificent dish in the Sèvres Museum, decorated in camaieu blue in a remarkable manner, with a figure subject representing Pharaoh's daughter placing Moses in his cradle, bears on the reverse the following inscription: "Fabrica di Torino 1736 Depint da Giorg Gracinto Rosser." This Hyacinthe Roux is the same whose Latinized name (Rossetus) is found on a table by Moustiers in the Limoges Museum. A polychrome piece bears the inscription: "Fabrica Reale di Torino 1737." About 1770 Prof. Gioanetti established a soft porcelain factory. The marks are a cross in the paste, or in color, sometimes with the addition of a V or V· N. The products were tasteful in shape and decoration.

TURKEY. Pottery with Persian designs is made at Brousa on the south shore of the Sea of Marmora. Brousa is the old capital of Turkey.

TURNER, JOHN, Longton, 1762-1786. He was an extremely clever potter and almost equaled Wedgwood in the quality of his blue and white jasper. In fineness of grain it left nothing to be desired, but is more porcellaneous, and the blue has a greenish or purplish hue in it. His black basaltes was excellent, as was also his cane colored or bamboo ware,

He also made excellent busts in fine stoneware, usually mounted on plinths of black basaltes. Miss Meteyard says his works were "of a high degree of beauty, both as to form and originality." He was succeeded by his sons, John and William, who continued the manufacture until 1803. The majority of his productions are stamped TURNER. M 223.

TURNER, THOS., born in 1749, son of the Rev. Dr. Turner, rector of Ely Castle and private chaplain to the Countess of Wigtown, became a partner in the Caughley works in 1772. He had served an apprenticeship at the Worcester works, and was one of the most brilliant men who ever graduated from that time-honored firm. He was not only a thorough practical chemist, but was also a designer of no mean abilty and a skilful engraver. Under his fostering care the works soon assumed importance, and in quality and design competed closely with Worcester. In 1780 he went to France, and brought back with him several skilled workmen, whose influence was quickly felt. He married a daughter of Gallimore, the niece of Thos. Brown, the founder of the works. He remained in possession of the works until 1799, when they were sold to John Rose. (See Caughley.)

TURNOR, RALPH, contemporary with Thos. Toft, producing similar slip-painted wares.

TWYFORD. The story of Josiah Twyford is so interwoven with that of the Elers Bros. and that of John Astbury as to need no recapitulation here. When the Elers left Staffordshire, and Astbury by his energy and research laid the foundation for the triumphs of Wedgwood, Twyford started a manufactory near Shelton Old Hall, the seat of Elijah Fenton, the Staffordshire poet, and the site of the present church at Shelton. Specimens of his work are extremely rare, and they are similar in character to that of the Elers. Twyford died in 1799, and was buried in Stoke Church. The precise date at which the Twyfords gave up potting at the original works is not known, but they have continued in the district, with probably the lapse of a generation, up to the present time. Prior to fifty years ago the Twyfords made general pottery; to-day their operations are confined to sanitary and plumbers' ware. Mr. T. W. Twyford introduced many innovations in the manufacture of sanitary earthenware, making it possible in many cases to dispense with unsatisfactory wood fittings. Since 1897 the firm has been known as Twyfords, Limited.

TYGS. The prototype of the lavishly embellished loving cup of the present day dates from the beginning of the seventeenth century,

one preserved in the Liverpool Museum being dated 1612. The earliest were provided with only two handles, and were not unlike a mug with incurved sides tapering towards the base. Gradually the number of handles was increased, and it was not unusual for them to have eight or ten. The shape became more globular, and sometimes it had a gourd like swelling in the middle. The term seems to have originated in Staffordshire. They were intended for the use of several guests, each person drinking from a separate part of the rim. From the inscriptions on them they seem mostly to have been intended as presents to housewives, and as an ornament for the "dresser," and also perhaps to show the skill of the donor. Probably they were only used on special occasions, and this may account for why so many have been preserved to us. The handles of the tyg were usually made with a sharp curve enriched with a small loop below and a knob above. The decorations consisted of pieces of applied clay, stamped in separate molds, and later of slip decorations. Being presentation pieces, the skill of the potter was expended on them, and though the result was not entirely in accordance with the present accepted canons of art, they display an ingenuity and creative power which we cannot but admire when we consider the fact that at the time of their production England was only awake to the dawn of art, and the commonest kind of earthenware satisfied the wants of a people imperfectly educated and of primitive habits. Thus there is no reason why we may not justly admire the productions of these early English potters. When the use of earthenware became more general tygs entirely disappeared, and the local custom of passing the tyg from hand to hand almost entirely vanished. Loving cups were still made in tortoise shell, or salt glaze ware, and upon them the workmen displayed his greatest skill; but early in the eighteenth century he abandoned the numberless combinations of handles which he had been in the habit of setting around his favorite piece.

U

UCHIUMI, KICHIZO, a present-day manufacturer of dark red ware at Kutani.

UJI, province of Yamashiro, Japan. Here the ware known as Asahi Yaki (Asahi ware) is made. The name is derived from its color, resembling the morning light. The original factory was founded about 1644. At the present time tea jars and tea vases of every description are made. Uji is the most celebrated tea district of Japan.

ULYSSE M. BLOIS manufactures artistic faïence in the old Italian style of the fifteenth and sixteenth centuries.

UNAKER. In the patent taken out in 1744 by Edward Heylin and Thomas Frye, Bow, they stated that the main ingredient in the porcelain body was an earth "the produce of the Cherokee nation in America, called by the natives 'unaker.'" It was identical with kaolin.

UNITED STATES. The history of modern pottery in the United States is necessarily brief, and, as has been the case with many other countries, mainly imitative. Looking back on the early days of ceramics in Europe, we find that all the leading potteries there were influenced largely in the matter of design by Oriental suggestions, until later they developed a distinctive style of their own. This influence is plainly observable in the old Delft ware, Meissen, Chelsea, and other prominent factories, and they in turn found their imitators. It hardly seems possible that the capabilities of ceramics have been exhausted; yet a moment's reflection will sustain the fact that since the days of Wedgwood no discovery of importance has been made. The industry in the United States is, of course, a transplanted one, and is largely of English origin. It would be interesting to know the exact percentage of industries founded by Englishmen, and compare it with the present percentage of manufactories owned by them. The difference would demonstrate beyond a doubt that the Englishmen are now in a minority as small as formerly their majority was large. There may be, but we do not call to mind a single English manufacturer in Trenton; there are one or two in East Liverpool who may be so classed, and these, with Edwin Bennett of Baltimore, and the Mayers, of Beaver Falls, constitute the minority. The industry may, therefore, be considered as distinctly American. In the period prior to the Revolutionary War but little pottery seems to

have been imported to this country, and its use was restricted to the few. The first attempt at pottery seems to have been made by a Mr. Bartlem, a Staffordshire potter, who emigrated to South Carolina in 1765 or 1766, but the venture was not a successful one. Another attempt was made at Philadelphia in 1770, of which nothing is known except some advertisements in newspapers of the period, and that in 1771 it was reported in England that "better cups and saucers are made than at Bow or Stratford." In 1789 Samuel Dennis made an unsuccessful application for State aid in founding a stoneware pottery in Connecticut in which he promised to make ware resembling Staffordshire queensware. A few years afterward (1796) Charles Lathrop, of Norwich, in that State, was making earthenware and stoneware, and about the same period Isaac Hanford, at Hartford, and Adam States, of Stonington, were also engaged in potting. In 1800 Van Wickle had a stoneware factory at Old Bridge, N. J., and two years later Price, at Sayerville, started another. They both used clay from South Amboy. There were doubtless other attempts made, of which no record remains. We have already noted the fact that in 1825 a factory for the manufacture of natural porcelain was started in Jersey City by a number of Frenchmen, which later developed into the American Pottery Company, where printing was first practiced in America; that Perrine & Co. had a stoneware factory in Baltimore in 1820; and the efforts of W. E. Tucker about the same period to manufacture china in Philadelphia. In 1834 Jas. Bennett built a small works on the banks of the Ohio at East Liverpool, the foundation of a pottery center which has since assumed proportions entitling it to the honor of being to America what "The Potteries" are to England. In 1838 the Hudson River Pottery at Twelfth street, New York, was started, and in 1847 Lyman Fenton & Co. at Bennington, Vt., erected the works where afterwards biscuit figures were first made in America. A year later Chas. Cartlidge was manufacturing china in the shape of door furniture at Greenpoint and afterwards made table china in commercial quantities, and in the same locality two years later the present Union Porcelain Works were inaugurated. In 1852 Taylor & Speeler commenced business at Trenton, N. J., in a small way, and from this humble beginning have arisen great hives of industry, which, passing through fluctuating fortunes and having overcome the many difficulties inseparable from the use of new materials, whose adaptability time alone would prove, have emerged triumphant. These pioneer potters, these indefatigable workers, who by their grit and determination laid the foundations of the ceramic art in America, are not too well known,

and occupy a far less prominent position in the minds of collectors and the public than will be accorded to them in ages to come. The time will surely arrive when the productions of Philadelphia, of Chas. Cartlidge, of Jas. Carr, of the Jersey City Pottery, and others of our early potters will be of inestimable value as records of their work; and it is even now not too early to store away specimens of the work of Thomas Copeland, of the New England Pottery, of the Robertsons, of Chelsea; of Burroughs & Mountford, of Trenton; of the creations of that erratic genius, Isaac Broome; of the Ott & Brewer productions, and of others who have made and are making pottery which in the future shall show the progress in the United States of the potter's art. To follow the development of this in its later days would only be to repeat what has already been written; but for the sake of convenience the following table has been compiled. The Trenton potteries are omitted, as they already have been tabulated. The present style of firm name is here used:

1840—Harker Pottery Company, East Liverpool, O.
1844—Goodwin Pottery Company.
1853—Knowles, Taylor & Knowles Co., East Liverpool.
1854—New England Pottery Company, Boston, Mass.
1857—Vodrey Pottery Company, East Liverpool.
1857—James Carr, New York.
1866—Chelsea Pottery (Robertsons).
1868—C. C. Thompson Pottery, East Liverpool.
1871—Onondaga Pottery Company, Syracuse, N. Y.
1874—Homer Laughlin, East Liverpool, O.
1876—Potters' Co-operative Company.
1879—Steubenville Pottery Company, Steubenville, O.
1879—Wellsville Pioneer Pottery Company, Wellsville, Ohio.
1879—Wheeling Pottery Company, Wheeling, W. Va.
1880—Rookwood Pottery, Cincinnati, O.
1880—Faïence Manufacturing Company, Greenpoint, N. Y.
1881—Mayer Pottery Company, Beaver Falls, Pa.
1887—Sebring Pottery Company, East Liverpool, O.
1887—Warwick China Company, Wheeling, W. Va.

During the half century that potting may be said to have been in existence in the United States a gratifying progress has been made. At one time, through the giving out of clay beds and the difficulty of finding another clay of exactly the same quality, the industry seemed in danger of extinction, and though this unavoidable cause put back American pottery fully twenty years, the energy of

those engaged in the business finally triumphed, and the earthenware now produced equals that made in any other country, with, perhaps, the exception of England. In the matter of shapes and designs, while they often lack originality, they are always tasteful and neat, and if the public demands designs which do not rise beyond a certain prettiness, that demand has to be satisfied. Only a few years ago and it would have been difficult to have named any pottery of note in the United States, with the exception of Rookwood, producing what could be legitimately termed art goods. Happily to-day no such difficulty exists, and the mere mention of such names as Newcomb, Grueby, Brouwer, and the Ceramic Art Company arouses a pardonable pride. China for some reason has been neglected, though the Onondaga Pottery Company at Syracuse and the Union Porcelain Works at Greenpoint have bodies in which there are possibilities for the development of purely ornamental pieces as great as those of any other country.

UNITED STATES POTTERY, Bennington, Vt. A factory was established here about 1846 for the manufacture of white, yellow and Rockingham, the proprietors being C. W. Fenton, H. D. Hall and J. Norton. Afterward the firm became Lyman & Fenton, and in 1849 the United States Pottery. It only existed until 1858, and is chiefly noteworthy on account of the fact that biscuit figures were made there the first time in America. Mr. Barber states that this was "in 1846, or possibly the preceding year," but this latter is scarcely probable in view of the fact that the first piece made by John Mountford at Copelands was cast Dec. 25, 1845. Daniel Greatbach, formerly of the Jersey City Pottery Company, was a modeler there, and reproduced his Hound handle pitcher, varying the top part. M 224 and 387.

UNION POTTERY COMPANY, East Liverpool, O. Manufacturers of earthenware. M 225.

UNION PORCELAIN WORKS, Brooklyn. This is the only manufactory in the United States making a true hard porcelain. Originally established about 1854 by a number of German workmen as a manufactory of bone china, it was rescued from extinction, which their want of knowledge and dishonesty nearly precipitated, by Mr. Thos. C. Smith, who had joined them in 1857. His purpose originally was to abandon the works and turn the property to account in some other way, but a timely visit to France so interested him that his resolution weakened, and on his return, armed with the results of his visits to French and English potteries, the manufacture of bone china was recommenced.

This body was retained until November, 1863, and early in the following year experiments were made with a view to produce a purely kaolinic china. It was not, however, until 1865 that he was able to place on the market plain white tableware. In the year following he commenced to decorate, his chief designer and modeler being Karl Muller, who has produced several important pieces, such as the Century and Keramos vases. Vases and statuettes are made, but the principal production is tableware, which is of excellent quality, both in body and glaze, and, on the whole, tastefully decorated. M 226.

UN-YEI. A Japanese manufacturer of Fujina ware (*q. v.*). Specimens of his work date from 1830 to 1840.

URBACK GEBRUDER, Turn, near Teplitz. Art ware in ivory and majolica with a line of fine figures.

URBINO, Italy. Faïence fabriques existed at Urbino at the close of the fifteenth century, but it was only in the second quarter of the sixteenth that they attained, under the protection of Guidobaldo II., a place of such importance that they must be ranked among the foremost of Italian manufactories. With those of Faenza the faïences of Urbino may be considered the most artistic and the most remarkable ceramic products of the sixteenth century. This renown was such as to make them esteemed as gifts worthy of presentation to sovereigns themselves, and for a long while it was commonly believed in Italy that many of them were painted by Raphael, whose compositions were reproduced with incontestable perfection. Three artists contributed to establish this renown. The first was Guido Durantino, whose reputation was widespread, and who received important orders from foreigners, as is proved by several pieces of a service bearing the arms of the Constable Montmorency, and dishes with the escutcheons of the Cardinal-Chancellor Dupont. Durantino signed his works with his name in full, preceded by the title of the subject represented—a pompous style later much exaggerated by other Urbino artists. The works of Guido Durantino, or Guido Fontana (*q. v.*), while sometimes incorrect in drawing, traced in blue with dry, hard modeling, are easily recognized by the vigor of their coloring and the brilliancy of the orange, which is almost red, and the free, bold execution. This artist was the first to cover the object with decorations without regard to the form of the piece, and despite this fault, of which the Faenza artists are guiltless, he may be easily forgiven when one sees the richness of his coloring and the beautiful execution of his marvelous ceramics. An artist no less celebrated, who lived at the same epoch, was Francisco Xanto Avelli da Rovigo, who signed his works in full or with his initials and the date—"X.

N., F. X. A. R., Urbino, 1530." In his *Notice des Faïences Italiennes,* M. Darcel says: "A skilful artist, Xanto lacks neither style nor breadth in drawing, and if there are among his paintings those that indicate haste and little care there are others that rival the most perfect specimens of faïence painting that have ever been produced. The general tone of his painting is light, with contrasts of brilliant black and luminous greens that give fine effect in his foliage and draperies." Xanto copied principally from engravings after Raphael, which he often modified and rearranged according to his own taste. The long inscriptions on the reverse of his pieces, intended as a comment or description of the subjects represented, show that if they emanated from the artist himself he was a man of culture. (See Francesco Xanto.) About the time of Xanto's death, in 1545, or a little later, another artist appeared whose name dominates those of all others in the history of the fabrique of Urbino—he was Orazio Fontana, son of Guido Fontana, who possessed a studio in which Orazio worked until 1565. The subjects painted by Orazio are easily recognized by a light outline made with the blue which he used in drawing his figures and with which he modeled the flesh; sometimes the same subject is painted entirely in camaieu blue, and in a style far superior to the usual execution of majolicas. The decorations with grotesques are principally due to Orazio Fontana, or, at least, to his atelier. Some of these decorations are most remarkable for their grace and skill, and are usually inspired by the compositions of Jean d'Undine and of Perino del Vaga. (See Fontana.) Another family of artists—that of Patanazzi—whose works date from the end of the sixteenth century, round up the series of faïence painters at Urbino. The oldest was Antonio Patanzzi, who most closely followed the traditions of Orazio Fontana. This family seem to have retained an atelier for a long time, for we again find in 1620 the name of a Patanazzi, Vincenzio, who, proud of his precocious talent, signed the pieces he painted with his full name and the mention of his age: *Vincenzio Patanazzi da Urbino di eta danni tredici del 1622.*" He was probably the son of Alfonso, of whom there are several pieces known, dated on the first year of the seventeenth century—"*Alfonso Patanazzi fecit—Urbino 1606.*" It was at Urbino that the faïences with figures, chimeras and ornaments, etc., in relief were made, which, despite their execution and the coarseness of the enamel, are usually of decorative form. But by far the most remarkable products of Urbino are without doubt the magnificent vases for which Battista Frances made the designs, that were in part executed by Orazio Fontana. After the death of the last duke of Urbino this incomparable series,

which comprises not less than 380 vases, was carried to the Santa Casa of Loretto, where they may still be seen to-day. According to Passeri, artists of talent—B. Franco, Raffaele del Borgo, and others —did not disdain to become ceramic painters, and join with Orazio to execute this series. At the close of the eighteenth century a Frenchman, named Rolet, was established at Urbino, where he made faiences with rather coarse decorations in the style of Moustiers, and marked them with the following singular inscription: "*Fabrica di majolica fina di Monsieur Rolet, in Urbino a 28 Aprile 1773.*" M 227.

URESHINO, province of Hizen, Japan. Near this place are situated the factories of Shida, Koshida and Yoshida, which were established about 1764-71. They manufactured articles for domestic use, ornamented with cobalt. Plates only were produced at Shida, while both at Koshida and Yoshida cheap and inferior teacups and bowls formed part of the trade.

UTZCHNEIDER & Co., Sarreguemines. This manufactory was founded in 1770 by Paul Utzchneider, and is still carried on by his descendants under the style of Utzchneider & Co. To retain its claim as a French pottery the firm have opened a branch works at Degoin in France. The products ore the firm have been extremely varied and have always had a high reputation. Imitations of jasper, marble, granite and porphyry of the most beautiful description, jasper ware similar to Wedgwood's, vases with black grounds and elaborate designs in white enamel heightened with gold and jewels, large vases and pedestals in majolica, and art tiles, are among some of the products. M 194.

V

VALENCIA. The almost unbroken, if unwritten, record of pottery in Valencia dates from the Roman epoch to the present day. Before its conquest by James I. of Arragon, in 1239, potteries had long been established, and were of such importance that the Moorish potters of Xativa (San Filippo) were protected by special edict. This charter provides that every master potter making vases, domestic vessels, tiles "rajolas" (an Arabic name synonymous with azulejos) should pay a "besant" annually, and freely pursue his calling. These wares were so highly esteemed in Italy that the Venetian Senate in 1455 passed an ordinance declaring that no earthenware should be admitted into the dominions of the Signory except crucibles and majolica of Valencia. The illustration represents a vase of this

period, and has a pierced scroll and votive inscription, and is covered with a beautiful golden luster. At the commencement of the seventeenth century the Valencian wares had lost nearly all their Moresque character, and the employment of copper luster only was retained, the designs having figures in the costume of that period, and coarse leafage or birds, with rococo ornaments. (See Spain.)

Valenciennes (France). The manufactory founded at Valenciennes about 1735 by Fr. Louis Dorez, whose father was established at Lille, was directly, after the death of the founder, in 1739, by his widow, and later by Joseph Bernard, whose incapacity compromised the existence of the establishment, and finally it was taken in charge by Claude Dorez, brother of Louis. The faïences of Valenciennes are not distinguished by originality; as at Lille, they were imitations of the products in vogue in the center of manufacture in France, those of Rouen especially. Nothing precise is known of another manufactory that existed from 1755 to 1757, nor of that directed by Becar from 1772 to 1774. Fauquez made porcelain at Valenciennes in 1785, and the works were in 1787 taken by Lamoninary. M 230.

Valognes. Hard porcelain of the best quality was made here from 1800 to 1810. Many artists from the Sèvres factory were employed.

Van Briggle Pottery. Mr. Van Briggle, a former artist at Rookwood, has a small pottery at Colorado Springs, where he produces works with a beautiful dead glaze and with ornament in low relief modeled directly on the "green" clay, and the glaze or glazes then blended on. This decorative modeling is most effective and is applied with the finest adjustment to the shape of the piece.

Vance Faience Company, Tiltonville, Ohio. This was organized in 1900, Mr. C. W. Franzheim being the president. An earnest effort is being made to produce a strictly artistic line of goods, the management being convinced that an effort in this direction applied to articles of utility as well as those of a more ornamental character

would meet with prompt recognition. Whilst the development of their plans has of necessity been somewhat slow, they are now sufficiently advanced to show that in the near future they will place on the market some effects as original as they are artistic and which should place them easily in the front rank of manufacturers. The molds of the Greatbach Jug used at the U. S. Pottery, Bennington, Vt., are in their possession, and this they have reproduced. We give an illustration of it. They have been fortunate in securing the services of a little coterie of enthusiastic artists from whom good results will quickly materialize. M 373.

VAN HAMME, J. A. William III. did all in his power to foster the introduction into England of the faïence of his own country, and was in the habit of making presents of his own portrait on large dishes. According to Henry Walpole, his ambassador at The Hague persuaded A. Von Hamme to go to England and establish a factory there. In 1676 he took out a patent for the sole practice of "the art of making tiles, porcelain and other earthenware after the way practiced in Holland, which has not been practiced in this our Kingdom." However, many pieces of English Delft ware bear dates anterior to this patent.

VAN WICKLE. About the year 1800 Van Wickle had a stoneware factory in operation at Old Bridge, now called Herbertsville, N. J. The clay used was obtained from Morgan's Bank at South Amboy.

VANLOO. A celebrated French artist who supplied many designs for figures and groups which were executed by competent artists at Sèvres during its first period.

VARAGES (Var). There were at Varages from 1740 to 1800 six fabriques that all imitated more or less coarsely the faïence of Moustiers, which was situated only eight leagues from this little place. None of the six fabriques appears to have marked its products, though there is a dish in the Sèvres Museum attributed to Varages, decorated with detached bouquets in the Moustiers style.

VARIEGATED WARES. Under this title are included the marbled,

combed, agate and tortoiseshell wares of the seventeenth and eighteenth centuries, and even earlier. They were thoroughly English in character, and though early specimens were rough and crude, in the hands of such experienced potters as Dr. Thomas Wedgwood, Thomas Whieldon and Josiah Wedgwood some beautiful effects were produced.

VECCHIO, F. DEL, Naples, made faïence in the eighteenth century.

VENGOBECHEA, GABRIEL, made coarsely painted faïence plates, signed with his name in full, at Houda, in Holland, in the eighteenth century.

VENICE (Italy). Venice possessed from the close of the fifteenth century manufactories whose products, now rare, were dated 1542, 1543, 1546, 1562, etc., and were in no wise remarkable, especially when compared with the products of other Italian fabriques of the same period. About the beginning of the eighteenth century—probably in a fabrique established at Murano by the brothers Bartolini, who asked the Senate for authority to open a store in Venice—faïence was produced of a distinctive style, characterized by the fineness, lightness, and, above all, by the density of the body, which was as resonant as metal. This series is composed principally of large dishes, slightly convex, ornamented with flowers, etc., in relief on the brim. The reliefs are defined by fine outlines drawn in black or blue, and the centers are decorated with landscapes, broadly painted and strongly colored, representing most frequently ruins. Often the entire piece is ornamented with embossments in relief, raised in pale blue on a dark blue ground. Venice also produced in the latter part of the last century carefully painted faïences of fine body, with pseudo-Chinese decoration, recalling that of its porcelain.

VERNEUILLES. Faience manufactured at Bordeaux, and so marked in stencil with two V's in monogram, has been ascribed to Verneuilles.

VERHAGEN, JOHANNES. Master potter established from 1725 to 1759 at the Sign of the New Moor's Head, a fabrique upon which he impressed a high artistic character. He signed with his initials, accompanied by a date. After his death his widow continued the manufactory, but she adopted the following as her mark: "C. B. S." M 232.

VERHAAST, GYSBERT. Ceramic painter born at Delft in 1737. His works, painted in polychrome, are veritable masterpieces of color and execution, and have erroneously been attributed to Johannes Vermeer. Some of them are signed in full "G. Verhaast."

VERONA (Italy). There is but one piece known that can with

certainty be attributed to this city, which, however, according to Piccolpasso, possessed about 1540 a considerable number of fabriques. It is a very beautiful dish, representing "Alexander and the Family of Darino," and bearing the inscription: "*1563 adi 15 genaro Giu Giovani Batista da faenza. In Verona.*" A monogram composed of an M joined probably to a V, but illegible because of a slight accident in firing, accompanies this inscription.

VERSES ON POTTERY. Jugs, mugs, etc., of the old English potter, 1775-1800, were often inscribed with inscriptions and verses. The Willett collection at Brighton is particularly rich in these. Some of these we cannot refrain from quoting. Tom Paine seems to have been particularly obnoxious to the potters—a jug bearing his portrait on one side and on the other a picture of him addressing a herd of pigs, from the back of one on which he is riding, with this couplet:

"Ye pigs who never went to college,
You must not pass for pigs of knowledge."

A white mug has these lines:

"Prithee, Tom Paine, why wilt thou meddling be
In other business which concerns not thee?
For while thereon thou dost extend thy cares,
Thou dost at home neglect thy own affairs.
God save the King!"

Another mug, in addition to the above, has the uncomplimentary addition:

"Observe the wicked and malicious man
Projecting all the mischief that he can."

Different trades and societies were favorite subjects, the cotton spinners being honored with this couplet:

"We cheerfully labor, we merrily sing;
Are true to our masters, our country and king."

While the potter's art is thus extolled:

"What handycraft can with our art compare!
For pots are made of what we potters are."

The tailor as a sportsman is lampooned in the following lines:

"There was a tailor a-shooting would go,
Who before had ne'er fired a gun, we well know;
The piece, double charged, hit him full in the breast,
And gave him the attitude as here expressed;
The gun left his hands, and the birds flew away,
And the tailor's been sick of the sport to this day."

The collier and the coal merchant are represented by:

"Success to the collier that works underground!
No better man living there is to be found."

"Coals by the bushel, coals by the peck,
If you have not a horse and cart you may carry
them on your neck."

Which bit of doggerel was evidently the production of Richard Nason, who appears on the reverse of the mug in the act of driving a cartload of coal. The farmer is eulogized in many more or less good verses, among which is the practical reflection:

"He that by the plow would thrive,
Himself must either hold or drive,"

and the following superlative lines:

"Let the wealthy and great roll in splendor and state;
I envy them not, I declare it.
I eat my own lamb, my own chickens and ham;
I shear my own fleece and I wear it.
I have lawns, I have bowers, I have fruit, I have flowers;
The lark is my morning alarmer;
So, my jolly boys, now, here's God speed the plough!
Long life and success to the farmer!"

Sports of all kinds, from cockfighting to horseracing, are largely represented, while amatory lines are so numerous as to preclude the possibility of selection. It must not be imagined that eating and drinking were not exploited, the most celebrated example of the combination of the two being a cup with the device of a gridiron surrounded by the motto "Beef and Liberty." This is the identical cup made and used for "The Sublime Society of Beefsteaks," or, as the members called themselves for shortness, "The Steaks." The

society was founded by Rich, the actor, in 1772, and met every Saturday night, the fare being restricted to beefsteaks, punch and port wine—the punch, no doubt, being brewed in this very cup. Fancy such a company as Hogarth, Sir James Thornhill, Garrick, Churchill, Rich, Colman, John Kemble, Dr. Johnson, the Dukes of Clarence and Sussex, gathered around the board, and joined later by the Prince of Wales, to admit whom the number of "Steaks" was increased from the original twenty-four to twenty-five. In 1808 the property and archives of the society were destroyed by fire, this cup and the club gridiron being alone saved.

VERSTELLE, GEERTRUY. She was a faïence manufacturer established at Delft at the Sign of the Old Moor's Head. The products, of which some are of a fine and careful execution, while the most are of ordinary make, bear the initials of her name—"G. V. S."

VEZZI BROTHERS, Venice. A china manufactory—the first after Medici—was founded in Venice by Francesco Vezzi about 1726, and continued until 1740. Some very beautiful works were attributed to this fabrique. The brothers were ennobled by the Senate in 1716. M 233.

VICTORIA PORCELAIN WORKS, Altrohlau, near Carlsbad. These works are controlled by Lazarus, Rosenfeld & Lehman, of New York. The china made is of fair quality, and the decorations neat 1716. M 233.

VIENNA. The royal factory here was established in 1719 by Claude Innocent du Pasquier, who induced a workman from Meissen, named Stenzel, to break his oath and go to Vienna. He had as partners C. Conrad Hunger, Martin Peter and Heinrich Zender. Conrad, not being promptly paid, did not communicate the secret, and after two years of unsuccessful work the factory was suspended. Du Pasquier, however, managed to obtain the secret, but not meeting with much success he sold the factory to the Government in 1747, and Marie Theresa appointed him as director. Up to 1790 the best work of Joseph Neidermeyer, the figure modeler, was produced. The factory was offered for sale in 1784, but no buyer appeared. In 1785, under Baron de Sorgenthal, great progress was made, and the works were at their best until about 1820. Good imitations of Wedgwood ware were produced under the direction of Flaxman. The works of such artists as Angelica Kaufmann and Watteau were beautifully copied, in conjunction with that rich gilding for which Vienna is so justly celebrated. Leithner produced some charming colors, the most notable of which was a rich cobalt blue and a brown red. A fine staff of artists was employed, which included Foestler,

mythological subjects; Lamprecht, who afterward worked at Sèvres, animals; Joseph Nigg, flower pieces; Varsanni, Wech, Perger, Raffey, Schallez and others. George Perl succeeded Leithner, and is distinguished as a decorator. Alexander Lowe was appointed to the directorate in 1856, and during this period—in 1864—the factory ceased to exist. The Austrian shield was the trademark, and from 1784 to 1864 the last three numerals of the year were embossed in the clay—thus, 863 for 1863. The mark is now used almost indiscriminately, both by manufacturers and decorators. At the present day Vienna possesses no china manufactory, but there are a number of china decorators. The Vienna Tile Works is an immense concern, employing 8,000 hands in its multifarious productions of brick, roofing, stove and bath or wall tiles. M 235.

VIEUX SEVRES. This term is arbitrarily applied to Sèvres soft china porcelain made before the year 1800.

VILLENGEN IN THE BLACK FOREST. Hans Kraut, who died in 1590, made tiles and bas-reliefs in the style of Nuremburg.

VILLEROY & BOCH. Established January 1, 1841, by the two families for the purpose of uniting the manufactories carried on by them at Wallerfangen, Septfontaines and Mettlach. The Wallerfangen factory was founded in 1789 by Nicholas Villeroy, a native of Metz, after he had given up a small factory at Frauenberg, Alsace. The first important progress mare at Wallerfangen was due to the French engineer, Aug. Jaunez, appointed in 1828, who introduced the English system of manufacture. The Septfontaines works were founded in 1766, a concession being granted to the Boch Brothers from the Austrian Government, which carried with it the right to use the title "Imperial Royal Manufactory," and to use as a trademark the Austrian double eagle. The Boch family came from Audun-le-Tiche in Lorraine, where Pierre Joseph Boch, the son of a foundry workman of the smelting works of Hayingen, established in 1784 a small pottery which he was obliged to abandon after a long, unsuccessful lawsuit with a neighbor. About 1790 *pâte tendre* was made, but only for ornaments and small figures. The blue and white earthenware made at this period, and marked with the intertwined letters B L (Boch, Luxemburg) is much prized by connoisseurs. The factory was very successful, but in 1795 P. J. Boch was driven from his home in consequence of the siege of Luxembourg by the French, and obliged to flee to Arlou. After a lapse of seven months he was able to return to find only a heap of ruins in the place of the stately manufactory he had left. He rebuilt the work and assiduously set himself to work to build up again the de-

molished results of thirty years' labor. He died in 1818. His son, Jean François, bought in the year 1809 the Abbey of Mettlach, which had been suppressed by the French Republic, with the intention of founding an earthenware manufactory there. Permission to build it was coupled with the condition that coal should be used in firing, wood only having been used in the ceramic industry on the Continent.

PIERRE JOSEPH BOCH.

At first calciferous ware was made at Mettlach, but about 1832, in order to make stronger ware, the lime was replaced by feldspar. In 1842 the first fine stoneware was manufactured, which laid the foundation of the later special manufacture of drinking vessels and artistic articles inlaid with colored clays, which are familiar to most of our readers, and for which the firm are so justly celebrated. In 1850 architectural ornaments in terra-cotta were introduced, and

in the following year Parian figures were made. In 1852 mosaic tiles for floors were made by hydraulic pressure instead of by the lever press from dry dust, as had been done at Septfontines since 1846. All these branches of business were successful, and the firm, which after the death of J. F. Boch in 1858 had been under the management of his son Eugene, found the capacities of the factories so overtaxed that a new manufactory was built at Dresden in 1853. Here are made the dinner and toilet services with the familiar onion pattern in blue, palettes for painters, wall and hearth tiles and plaques, vases, etc., with colored glazes. In 1879 a small factory at Merzig was absorbed by the firm, and here are made figures up to twice life size, monumental tombstones, mosaic and other tiles. In 1883 another factory was acquired. This is at Schramberg, and is used for the production of white earthenware and ornamental objects in majolica. Some idea of the extent of these factories may be gathered from the fact that considerably over 5,000 workpeople are employed. In connection with these works there are various relief funds, sleeping and dining rooms, the charges for which are most moderate—sleeping accommodations for one night, breakfast, dinner and supper, fifty-five pfennigs—hospitals, schools for the children, nurseries for the babies, free shower baths, gymnasium and swimming baths; and the firm will also, to encourage thrift, build houses for its workpeople on most advantageous terms. M 236.

VINCENNES (Seine, France). The existence of this manufactory is only known by a decision of December 31, 1767, according to a M. Maurin des Aubiez, of the authority to establish in the Castle of Vincennes in the old location of the royal manufactory of porcelain, transferred in 1756 to Sèvres, a fabrique of "faïence in the style of Strasbourg, imitating porcelain." This fabrique was directed by Pierre Antoine Hannong, but the products, which are without any distinctive character, are easily confounded with those of the other manufactories of the Hannongs. M 237.

VINCENTE, FERRAR. A director at Alcora, Valencia, early in the eighteenth century.

VINEUF, near Turin (Italy). Dr. D. Gioanetti established at Vineuf in the latter part of the last century a porcelain manufactory where he also produced faiences bearing the same mark as the porcelain—viz., a V surmounted by the cross of Savoy.

VIOLINS. Tradition states that a potter of Delft had four daughters about to marry four ceramic painters the same day, and that the four grooms played on four faïence violins, while some of the guests played on various instruments made of the same ware. Four

such violins are known in European collections, one of which we illustrated in the article on Delft. Faïence violins are now made at Sornewitz and are said to be excellent in tone.

VIOLET. In the tenth century the Chinese used three tints of violet—the aubergine, or egg-plant violet; manganese violet, and a third tint of great softness and beauty. This was often effectively used in conjunction with turquoise blue, the one color shading gradually into the other.

VIRGINIA. Cookworthy, of Plymouth, in 1745, alludes to the discovery of china clay and china stone in Virginia, and as having seen samples of china made from it "which I think are equal to the Asiatic."

VERY, G. A painter at the works of Pierre Clerissy, Moustiers, about 1711.

VISTA, ALLEGRE, near Oporto. A hard porcelain factory was established here in 1790 by Pintobosso, and was in existence up to 1840. The mark was a crown surmounting the letters V. A. M 238.

VITERBO (Italy). On a dish in the Kensington Museum that has a border of trophies and a center subject representing Diana and Acteon, a figure holds a ribbon bearing the inscription "I. Viterbo Diomed, 1544." Up to the present this is the only piece known to have come from this fabrique.

VIZEER, PIET. Faïence maker at Delft in 1752, where he produced principally plaques and polychrome tiles, which he signed in full, "P. Vizeer."

VODREY POTTERY COMPANY, East Liverpool, Ohio. This works was founded by Woodward, Blakeley & Co., who were succeeded by Vodrey & Bro. From 1857 to 1875 Rockingham and yellow ware only were made. In the latter year the manufacture of white granite and semi-porcelain was commenced and has been successfully continued. The firm was incorporated under the above style in 1896. M 239.

VODREY, JABEZ, father of Colonel W. H. and James N. Vodrey, members of preceding firm, made yellow ware in Pittsburg in 1827.

VOGT, M. Head of the chemical department of the manufactory of Sèvres, under M. Lauth.

VOISINLIEU (Oise). About 1839, Jean Ziegler, an artist of some ability, whose failing sight obliged him to abandon painting, established at Voisinlieu, near Beauvais, a manufactory of artistic stoneware, of which some specimens deserve special notice. The body of this stoneware is generally covered with a glaze that shows the

brown tone of the ware through it, and that is hard and sonorous. The large Apostle jugs, of which specimens may be found in the museums of France and elsewhere, are remarkable productions. The stoneware of Voisinlieu is marked in the paste with a J. Z. in a square.

VOLEUR, JEHAN DE, at Hesdin, France, was toward the close of the fourteenth century acquainted with the use of stanniferous enamel.

VOLKMAR, CHARLES, Corona, N. Y. Mr. Volkmar started on his career as a potter in Brooklyn in 1895 and a little later formed a partnership with Miss Cory, and the works were moved to Corona, N. Y. In addition to some plaques with American subjects in the underglaze blue, he has produced some good pieces in stoneware.

VOLTAIRE. In his "Siècle de Louis XIV." there occurs a passage confirming the claims of St. Cloud as being the first porcelain manufactory in Europe: "They began to make porcelain at St. Cloud before it was manufactured in other parts of Europe."

VON LANG. A fugitive workman from Furstenberg who assisted in the founding of the Copenhagen China Works in 1772.

VOYEZ, J. A French sculptor who worked in London for Adams, the celebrated architect and decorator. In 1768 he is said to have gone to work for Josiah Wedgwood. Professor Church describes him as a "pirate" who "sometimes worked for Palmer and sometimes on his own account. He went so far as to forge the names of Wedgwood and Bentley upon the intaglio seals which he made." His original work was much esteemed. He was probably employed both by Ralph Wood and Wedgwood. He published in 1773 a catalogue of his imitations of cameos, under the title "A Catalogue of Intaglios and Cameos after the most esteemed of the Antiques, made by J. Voyez, sculptor, Member of the Royal Society of Artists of Great Britain, and to be sold at his house at Cobridge, near Newcastle, Staffordshire."

VRON (Somme). This manufactory, founded in the latter part of the eighteenth century by Courpont, produced chiefly tiles for furnaces, chimneys and walls of butchers' stalls, inkstands, dishes and plates and vessels of different kinds, decorated in colors, or oftenest in violet bordering on black, with figure subjects, landscapes or animals badly drawn, but having at least the merit of originality. After the death of Courpont, his brother, who continued the business, married Verlingue, and their daughter married a man named Delahodde, into whose hands the fabrique finally passed. A plaque in the Museum of Sèvres, bearing in the center the words *"Vive le*

Roy" and the device *"Manibus lilia date plenis,"* is signed "Manufacture de Vron, 25 Avril, Delahodde Verlingue, 1815."

VULCAN. In the origin of pottery accepted by the Greeks, Vulcan is credited with having made Pandora, the first of mortal women, out of clay, as a wife for Prometheus—a punishment inflicted on him by Jupiter for his rash impiety.

W

WACKENFIELD. A potter from Anspach who was in 1721 associated with Charles François Hannong at Strasburg. (See Hannong.)

WAHLEISS, ERNST, Teplitz. Makes principally ornamental china, some of it of a high order of merit. Mr. Wahleiss died last year. M 240.

WAKAYAMA, Province of Kii, Japan. Kishiu ware is made here. The factory is supposed to have existed for over two hundred years, but according to Ninagawa, an authority on Japanese ceramics, it dates only from 1804-17. It is an inferior ware, generally mottled in purple, yellow and blue.

WAKANETSU-HIKO-NO-MIKOTO. The Emperor Jimmu in the first year of his reign, B. C. 660—the year in which the historical period of Japan commences—ordered Wakanetsu-hiko-no-mikoto to manufacture various kinds of pottery to be used in the temple for religious services. He succeeded in producing a coarse kind of earthenware, fired in a pit in the ground, covered with wood.

WAKE KITEI. Japanese potter, the second generation of this name, who manufactures Sometsuke (porcelain decorated in blue under the glaze).

WALKER & BEELY. Beely is the diminutive of Billingsley. They founded the factory at Nantgarw. George Walker and Billingsley were brothers-in-law. (See Nantgarw.)

WALKER, BROWN, ALDRED, and RECKMAN. Proprietors of the Lowestoft works in 1757. (See Lowestoft.)

WAL, JOHANNES VAN DER. Potter of Delft, 1691. Later he was foreman with Lambacher van Eenhorn in the fabrique of the Metal Pot, and finally established on his own account. His products, which were of an inferior order, were marked with his monogram—J. V. D. W.

WALL TABLETS. Early in the eighteenth century, in The Pot-

teries, wall tablets of earthenware were made, bearing the initials of the builder or owner and a date, which were inserted in the walls of houses in the district. Many of the churches are ornamented with a string course of encaustic tablets in memory of departed members of the congregation. These form such an impressive and effective memorial, are so entirely in character with the sacred edifice, that it is a wonder they have not been extensively used here.

WAMPS. A potter from Holland who founded a factory at Lille, France, in 1740.

WANDELEIN. A celebrated chemist attached to Marquis Ginori's establishment La Doccia, near Florence, and whose skill and ability did much to make the reputation of this celebrated house.

WARBURTON, MRS. Enameling on cream color was successfully carried on about the middle of the eighteenth century by Mrs. Warburton. She is credited with having in 1751 made an improvement in the body of earthenware. She acquired great celebrity for her painting, and until 1769 she enameled for Josiah Wedgwood.

WARNER, EDMUND. As evidence of the early date when white and painted earthenware was made in London, in 1693 Edmund Warner commenced an action against the Custom House authorities, who had seized some potter's clay imported from Holland. Five London potters gave evidence as to the clay being of the same kind they had constantly bought from Warner for twenty-five years.

WARWICK CHINA COMPANY, Wheeling, W. Va. This company was organized in 1887. J. R. McCortney was president and M. N. Cecil secretary. Mr. McCortney retired in 1889, his place being taken by Mr. O. C. Dewey, a position he occupied for a few months only, as in November of the same year he was succeeded by C. W. Franzheim, who held the position until February, 1893, when he retired, and Mr. Thomas Carr, who was at that time manager, was elected president, a position he has since most worthily filled. Mr. Carr is the son of James Carr, the veteran potter, who occupies a prominent position in American ceramic art. The manufactures consist of semi-vitreous earthenware, jardinières and an extensive line of specialties. Under Mr. Carr's able and energetic management the products of the Warwick China Company have greatly enhanced in importance. The body has been brought to such a state of perfection that that bugbear of all manufacturers of pottery, crazing, is practically unknown; decorations are selected with taste and judgment, and new shapes, generally characterized by graceful modeling, are constantly added. The firm have made quite a reputation for their extensive line of what are called "novelties," which

means the thousand-and-one articles of utility not included in the composition of regular table services, or of such a distinctive shape as to give them a more ornate appearance than is usual in a service. M 241.

WATANI. A present-day potter of Kutani, Province of Kaga, Japan.

WATSON, J. R., Perth Amboy, N. J., in 1833 had a manufactory there of fire-brick and stoneware.

WATTS, JOHN. Partner with John Doulton. They established the Doulton factory at Lambeth in 1815. Mr. Watts died in 1858.

WEDGWOOD. At once the best known and the greatest name in the history of English pottery. The Wedgwoods constituted almost a clan in themselves, so numerous were they. In the seventeenth and eighteenth centuries the surname Wedgwood half fills the parish registers of Burslem. As early as 1370, in the reign of Edward III., Thomas de Weggewood is mentioned. It was the second branch of the family that removed to Burslem, and we find that Gilbert Wedgwood settled in Burslem in 1612, and became the ancestor of a long line of potters. He made the ordinary stoneware of the day, such as butter pots, porringers, and the like. 1691 is the earliest dated piece of ware bearing the name of Wedgwood. It is a puzzle jug in the style of Delft and bears the lines:

"Here, gentlemen, come try your skill!
I'll hold a wager if you will
That you don't drink the liquor all
Without you spill or let some fall,"

and the inscription "John Wedgwood, 1691." Thomas Wedgwood, the son of Gilbert Wedgwood, owned a large part of Burslem, including two or three pot works. He died in 1679. His son, Dr. Thomas Wedgwood, was the principal potter of Burslem, making salt glaze and other wares. Agate ware he produced in great perfection. He had both the Overhouse and Churchyard potteries at Burslem. Aaron Wood, the acknowledged best block cutter of the time, was apprenticed to him. In 1740, Thomas and John Wedgwood, one a fireman and the other a potter, established themselves at Burslem, and made protracted experiments with a view of testing the value and qualities of all available clays—experiments which were of infinite service to the whole trade. They also demonstrated that some of the waters then indiscriminately used were unfit for potting purposes. The results obtained by these careful experi-

ments and investigations marked a distinct advance in potting. Thomas Wedgwood, the third, inherited from his father the Churchyard Pottery. He was the father of Josiah Wedgwood. Aaron Wedgwood was a potter in Burslem about 1765, and in conjunction with William Littler effected an improvement in the color of earthenware, making it white by adding a small quantity of zaffre with the glaze. They were also the first to glaze their ware by immersion. Ralph Wedgwood, a cousin of Josiah, in 1796 joined the firm of Tomlinson & Co., of Ferrybridge, Yorkshire, and the style of the firm was changed to Wedgwood & Co. This mark was impressed on the ware, the name of the place being sometimes used in addition. Wedgwood & Co. are manufacturers of earthenware at Tunstall.

WEDGWOOD, JOSIAH. To obtain a true estimate of the influence exercised by Josiah Wedgwood on English ceramics it is necessary to briefly review the conditions of the art in the time immediately previous to the commencement of his labors. The beautiful white salt glaze stoneware, difficult sometimes to distinguish from porcelain on account of its thinness, translucency and whiteness, had been perfected. Astbury had discovered the use of ground flints, which made possible a perfectly white body, easily formed, and which would not crack in the firing. And Booth, thirty years later (1750), had supplied a colorless fluid glaze by his method of dipping the ware into a glaze kept in suspension in water. In the hands of potters of such caliber as Whieldon and others this earthenware body was so improved as to leave but little for Wedgwood to add to. Of a jug made by him in 1757 M. Solon says: "Anything better made than this jug cannot be imagined. It is as thin and true as if it were made of metal." This same jug has the characteristic English decoration of applied reliefs made from separate molds, and which Wedgwood could make no improvement on for his jasper ware. The high standard obtained should be borne in mind; and though his was undoubtedly the master mind, let us not forget those who made his improvements and discoveries possible. The story of Wedgwood's life has been told times without number and with a keen appreciation of his efforts, notably by Llewellyn Jewett, Miss Meteyard and Samuel Smiles. We have already seen that he came of a race of potters. He was the youngest of the large family of Thomas and Mary Wedgwood, and was born July 12, 1730. After his father died in 1739 he was taken away from school, and with this rudimentary education he made his start in life. His brother Thomas had succeeded to the Churchyard Works, and here at an early age he was employed, and familiarized himself with the making of butter

pots, black and mottled ware, and other ware of a common description. He early developed a taste for modeling, but was not allowed to follow this natural bent of his mind, and was set to work as a thrower. In this he made rapid progress—his skill soon attracting the attention of his fellow-workmen. In 1741, when Josiah was only eleven years old, virulent smallpox broke out in Burslem, and one of the worst cases was that of the young thrower. The disease threatened to be fatal, but after a long and painful illness he recov-

JOSIAH WEDGWOOD.

ered sufficiently to be able to resume work, but his right knee was painfully affected, and was never completely healed. In 1744 he was bound apprentice to his brother as a thrower and handler for a period of five years. The original indenture is preserved in the Hanley Museum, and is signed by his eldest brother and his two uncles, Samuel Astbury and Abner Wedgwood. On account of the injury to his knee he was obliged to sit with his leg extended on a stool before him, and this so hampered his position at the wheel that he was soon obliged to abandon the thrower's bench, and went to the molder's board. This ailment of Wedgwood's has always

been regarded as a blessing in disguise, for, while it prevented him from growing up an active, vigorous workman, it set his mind to studying the laws and secrets of his art. It must be borne in mind that chemistry at this time was practically an unknown factor in the manufacture of pottery, but in spite of this and in course of time, as his mind became enlarged, he made experiments with all the clays he could procure, and endeavored to find out new methods of ornamenting them. He spent so much time in these experiments as to cause his brother to expostulate with him and enjoin him to confine himself more to his regular trade. But Josiah was too much interested in his art, and applied himself all the more diligently to his studies, with the result that when his apprenticeship ended he was told he would not be allowed to jeopardize the prospects of the manufactory with his new and untried experiments, and that he must find another field for them. He, however, continued to work as a journeyman for his brother for two years, and on arriving at maturity was paid the twenty pounds bequeathed him by his father; and with this modest capital entered into partnership with John Harrison and Thomas Alders, of Cliff Bank, near Stoke. Alders was a working potter; Harrison a tradesman of Newcastle who supplied the capital. Two years later, Harrison, becoming dissatisfied with his share of the profits, withdrew, and the works were shortly afterward pulled down. About 1752 he joined Thomas Whieldon, one of the most if not the most skilful potter of the day, at his works at Fenton Hall, near Stoke. He devoted himself to modeling, and also to the improvement of the various agate, tortoise-shell and cauliflower ware then being produced. One of his principal productions was a beautiful rich green glaze. Dessert services in the form of leaves were made in this, and instantly became popular. His right leg and knee tormented him, and he was often obliged to absent himself from the works; so much so that it became necessary to confide the formula of the green glaze to others, with the result that it soon became common property. His experiments to improve the then existing manufactures were long and arduous, and were carefully tabulated for reference. His partnership with Whieldon ended in 1759, when Whieldon retired, having accumulated a fortune. In 1760 Wedgwood rented a portion of the Ivy House Works from his distant cousins, John and Thomas Wedgwood, at a rental of £10 per year, the working premises consisting of two kilns, a few tile-covered sheds and the ivy-covered cottage. With a few workmen only, and among whom was his second cousin, Thomas Wedgwood, who had been a potter at Worcester, he made

his green glaze ware, his tortoiseshell and tinted snuffboxes, his perforated plates; and these from their beauty and careful finish attracted attention to him, and he was obliged to increase the number of his workmen and to hire a new works. The new premises were known as the Brickhouse Works, but soon came to be known as the Bell Works, from the fact that a bell was used instead of a cow's horn to summon the workpeople together. The site of these works is now partly occupied by the Wedgwood Memorial. Wedgwood's chief difficulty lay with his workpeople, who were inclined to be lazy and careless in their work, who were far from renowned for sobriety, and could not or would not understand for a long time the necessity of absolute care in the details of each piece made, or accustom themselves to the new tools which their employer had invented. But he had infinite patience, and at last the roystering crew was turned into an ardent band of skilled craftsmen. His new wares, too, required much more careful firing than the butter crocks of old, and many difficulties presented themselves; but by dint of observation and experience the difficulties were at length happily solved. Inspired by his financial success, his workmen now gave him every aid in their power, and what the fertile and busy brain of Wedgwood conceived found ready hands to carry it to perfection. It was at the Bell Works that the celebrated earthenware was produced which was to earn him the title of Queen's Potter, and the ware itself that of Queensware. This ware he tinted in various hues, such as cream color, saffron and straw. It was often enameled with well-painted designs of flowers, etc., and the more gorgeous patterns became very popular on the Continent. In addition to services, a large number of vases and statuettes were made in this ware, ornamented with various kinds of enameled decorations. The following inscription in red enamel occurs on a large dish of this ware: "This dish was made at Etruria by Messrs. Wedgwood & Bentley, the first year after Messrs. Wedgwood & Bentley removed from Burslem to Etruria. Richard Lawton served his apprenticeship at turning with them, and has had it in his house for more than fifty years. It is my brother William's modeling. It was turned on a hand lathe, as plates were at that date. I preserve this to show the quality of Cn Cr" (? common cream ware) "before the introduction of growan or Cornwall stone. This body is formed of flint and clay only, the same as used for salt glaze ware at that time, and flint and lead only instead of salt glaze, and it is fired in the usual and accustomed way and manner as usual for glazed teapots, tortoiseshell, mottled and agate, and caulifiower, etc.

Also sand from the Mole Cop" (? Mow Cop) "and Baddley Edge was used either in the body or glaze. N. B.—Before flint was introduced they used a certain proportion of slip for the body in the glaze to prevent crazing, and to make it bear a stronger fire in the glost oven. I was the first person that made use of bone in earthenware when in my apprenticeship at Mr. Palmer's, at Hanley Green. ENOCH WOOD. Burslem, Sept. 26, 1826." Wedgwood, though so busy with his own concerns, found time to devote to the improvement of the roads in and around Burslem. These at this time were in a villainous condition, and were mere lanes, totally impassable in anything but the driest weather. Materials were brought from considerable distances—from Liverpool, Cornwall, and up the River Severn to Bridgenorth—chiefly on packhorses, and the manufactured articles were returned in the same manner. The lowest charge was eight shillings a ton for ten miles. The goods were subject to breakage and pilferage, highwaymen infested the roads, and all these evils made living expensive, and impeded both manufacture and agriculture. Wedgwood was foremost in promoting an application to Parliament for powers to repair and widen the road from Lawton, in Cheshire, to Cliff Bank, at Stoke. The bill was passed in a modified form, making one end of the road stop at Burslem. But his efforts in this direction did not stop here; and though it took years of hard work and honest effort he did not relinquish his purpose until roads in good condition led in all directions from Burslem, and the canal connecting the Trent and the Mersey was an accomplished fact. Jasper ware was Wedgwood's great triumph, for it was an entirely new body, differing from anything known in its chemical composition and physical properties. It has the peculiar property of receiving through its whole substance a metallic coloring matter, which no other body, ancient or modern, possesses. The secret of its manufacture was preserved for about twelve years. It is composed of sulphate and carbonate of baryta, in combination with flint and clay stained with oxides. Wedgwood had long been desirous of emulating some of the works of the ancients, and these two bodies gave him the opportunity to do so. The basaltes excelled anything made in Greece. The first jasper was white, and gradually Wedgwood added blue of various tints, lilac, pink, sage green, yellow and black. In 1777 he invented a "jasper dip," which consisted of the white jasper with a surface coloring produced by a wash of a mixture in which metallic oxides formed the chief ingredient. In 1763 Wedgwood adapted the engine lathe to pottery purposes, and it became a most important tool. His first application of it was

to the red porcelain, which, being of a close texture and without glaze, retained in the best manner sharpness in the work. He afterward used it for queensware vases. Quick to take advantage of every improvement, he utilized the services of Sadler & Green, of Liverpool, sending them large quantities of ware to decorate by their newly invented process of transfer printing. But the mode of procedure was so complicated that after a time he bought the right to make transfers for himself. Whether he actually availed himself of this process to lampoon William Pitt I do not know, but the following paragraph, which appeared at the time, either indicates so, or the wish is father to the thought: "I am told that a scoundrel of a potter, one Mr. Wedgwood, is making 10,000 spitting pots and other vile utensils, with a figure of Mr. Pitt in the bottom. Around the head is to be a motto: 'We will spit upon Mr. Pitt,' and other such d——d rhymes suited to the use of the different vessels." All the time Wedgwood was tormented with the ailment in his knee, and this was exaggerated by a journey on horseback to Liverpool, where he struck his knee against the wheel of a cart. A serious illness followed—an illness which was the direct cause of his introduction to Thomas Bentley, his future partner. The two conceived a great attachment for each other, which resulted not only in a partnership, but in a pure and beautiful friendship. Wedgwood was married January 29, 1764, to a remote connection—Sarah Wedgwood—an heiress, and daughter of Richard Wedgwood, a cheese factor of Spen Green, in Cheshire. The principal markets for his goods were the Continent and North America, and about this time he seems to have been seriously afraid that the Colonial trade would be lost, writing to Sir William Meredith: "They have at this time an agent among us hiring a number of our hands for establishing a new pot works in South Carolina, having got one of our insolvent master potters to conduct them. They have every material there equal, if not superior, to our own, for carrying on the manufacture. Therefore we cannot help apprehending the untoward consequences of our own home commerce." The year 1766 was a notable one, seeing, as it did, the production of unglazed black porcelain, or Egyptian ware, jasper ware and cane ware. He was also at the same time experimenting upon mortars for chemists' use. Egyptian black ware owes its color principally to iron; and it was much finer in grain and richer in hue than that previously made. Seals, plaques, life-size busts, ancient and modern medallion portraits and lamp vases (for illustration see Egyptian Black) were extensively made. Wedgwood began his artistic work in cameos by working from plaster

casts of engraved gems of antique Roman or Greek origin, but later from the originals themselves. Many artists, both English and foreign, were constantly employed in producing new designs or copying the figures from ancient vases, the best known of which are Flaxman (*q. v.*) and William Hackwood (*q. v.*). Flaxman was engaged in 1775 to model portraits and plaques of classic subjects, and the beautiful work he produced added greatly to Wedgwood's fame. His vase representing the Apotheosis of Homer is one of his best known pieces. Seven hundred guineas were paid for one of these vases—the highest price realized in modern times for a Wedgwood vase. Wedgwood's masterpiece in this ware is generally regarded as the Portland vase (*q. v.*). A rich black-blue ground was chosen, and fifty copies were made, which were subscribed for at fifty guineas each. Copies are produced at the factory to-day for less than one-tenth of that sum. To give an idea of the multiplicity of articles made in jasper ware would be impossible, and merely to describe the classes and sections in which Wedgwood arranged his intaglios, portrait medallions, statuettes, vases, jardinières, etc., would occupy several pages. Professor Church, than whom there is no higher authority on English ceramics, says: "His improvements in the potting or fashioning of his wares, and in their body or paste, were very great and perfectly legitimate. So much as this cannot be said of the artistic value of his work. Accepting and even encouraging the prevailing fashion of his day, Wedgwood adopted the rather shallow conception of classic art then in vogue. Classic forms stimulated and satisfied his efforts toward mechanical perfection; classic finish he tried to render by means of those fine pastes which he was elaborating. But no amateur of antique gems would accept his copies as adequate translations of the originals. The lens reveals the roughness of grain, the lumpiness of surface, and the faults of contour in the one, while it serves to bring out the beauty of the other. But to the portraits of contemporary celebrities which he produced in jasper and basaltes ware, to his works after Flaxman, and to a great deal of his 'useful' ware must be accorded the very highest praise. In a word, Wedgwood was a great potter, but not a great artist. In the former capacity he influenced favorably the whole subsequent course of English ceramic industry; less happy in his results have been his fondness for the antique and his lack of originality." Prof. Middleton, who was selected to write the article on pottery for the Encyclopædia Britannica, says: "He neglected the special requirements of fictile work. His productions, delicate and beautiful

as they often are, have the characteristics of anything rather than pottery. At great labor and expense he turned out from his workshops imitations, necessarily unsuccessful, of ancient engraved gems and cameos, of jasper, basaltes or mottled marble, of gemlike cut glass, such as the Portland vase, and dull copies, feeble in drawing and hard in texture, of beautiful painted Greek vases. Of natural methods of decoration suitable to pottery, or of the life and freedom of the plastic clay rising in graceful forms under the touch of the thrower's hand, aided by the rhythmical movement of the wheel, he knew nothing. Nearly all his pottery is dully scholastic and archeological in style, and therefore must on the whole be regarded as a failure, though often a very clever and even beautiful failure." During Wedgwood's illness in Liverpool he arranged with Bentley to come to Staffordshire, but instead of remaining at the works he went to London, where his affability and courtly manner eminently fitted him to associate with the distinguished crowds who now visited Wedgwood's showrooms there. The example of Queen Charlotte had been followed by the aristocracy, who not only gave him extensive orders, but placed such of their art treasures as he desired at his disposal. Perhaps the best known of his queensware services was executed for the Empress of Russia—Catharine II. It took more than eight years to manufacture, having been commenced in 1766 and finished in 1775. It had 1,200 views, many of them sketched for the purpose, of English life and scenery. This service is much treasured in the Russian royal family. The views are principally of the palaces and seats of the English nobility. In 1769 his manufactory was partially removed to a new works he had built midway between Burslem and Stoke, and which he named Etruria, and was completely installed there in 1771. In addition to his manufactory, he had works at Chelsea, where a large number of artists were employed. These were under the supervision of his partner, Bentley, whose partnership, however, did not extend to the "useful" portion of the productions. Notwithstanding the burden of conducting such a large business, Wedgwood was indefatigable in his researches and experiments, always insisting that the capabilities of pottery had been by no means exhausted. In addition to queensware, jasper and basaltes, he also made a white semi-porcelain which he used first for plinths of vases and later for portrait medallions and plaques, ware marbled on the surface and under the glaze, and an improved agate ware, recalling, without exactly imitating, the appearance presented by many beautiful natural agates and marbles. He also invented an instrument for measuring the heat during the

firing of the ware. During all this time his leg still troubled him, and four years after his marriage it was amputated, and henceforth he walked through life with a wooden leg. His greatest comfort was the love and assistance of his wife, who entered heartily into all his projects, relieved him to a large extent in his correspondence, nursed him in his sickness, cheered and encouraged him, and was his constant companion. His eyesight, too, began to fail him, but he showed no lack of courage, and indomitably went on with the work he had appointed himself to do. In his workshop he insisted on the highest standard of excellence; and if any piece was brought to his notice which in his judgment did not conform to this he ordered it to be destroyed, or more frequently destroyed it himself. His success was the success of the district, for other manufacturers adopted his improvements. His efforts in the promoting of good roads and canals benefited them equally, and the trade and importance of the district quickly and largely increased. His inventions, to a great extent, were a gift to the district, for he never took out but one patent, and that of an unimportant nature. When Champion, of Bristol, applied for a renewal of Cookworthy's patent it was vigorously opposed by the Staffordshire potters, with Wedgwood as their leader; and though this opposition has been considered factious, his view that the free use of the china clay of Cornwall would improve manufactures and extend commerce was reasonable. The House of Commons passed the bill, but in the Lords it was modified by two clauses—one making it imperative on Champion to enroll anew his specification of both body and glaze within four months; the second throwing open the use of the raw materials for potters for any purpose except the manufacture of china. He afterward made a journey to Cornwall to investigate the clays found there. Later he went to Meissen with a view of purchasing the royal manufactory there, but nothing came of the project. He was an enthusiastic and liberal supporter of the abolition of slavery, was treasurer of the Grand Trunk Canal and a member of many learned societies. He died January 3, 1795, aged sixty-five years, and was buried in the old parish church at Stoke-upon-Trent. His children, to whom he was passionately attached, were: Susannah, the eldest, born January 3, 1765; John, March 28, 1766; Richard, July 11, 1767 (died June, 1768); Josiah, August 3, 1769; Thomas, May 14, 1771; Catharine, November 30, 1774; Sarah, September 25, 1776; Mary Anne, August 19, 1778, who died the following April. Five years before his death—his partner Bentley having died in 1780—he had taken into partnership his three sons, John, Josiah and Thomas, and

his nephew, Byerley. Miss Meteyard says his two sons absented themselves from the works and the prosperity of Etruria declined, and it was left to another generation to revive and give progress to the varied branches of that noble handicraft. John and Thomas retired, and the firm became Josiah Wedgwood, Son & Byerley. The management was assumed by the latter until his death in 1810. In 1823 the third Josiah became a partner, and four years later his brother Francis was admitted, and the firm name was changed to its present style. In 1809 the manufacture of china was commenced, but it was abandoned nine or ten years later, to be again revived some ten years ago. John Boyle, sometime partner with Herbert Minton, and Robert Brown were both partners for a limited term of years,

the firm eventually consisting of the present members—Godfrey, Clement and Lawrence, sons of Mr. Francis Wedgwood. In 1860 the manufacture of majolica was added to the firm's productions, and in 1865 was revived the solid jasper body. Lessore (*q. v.*), an artist of great originality, was an honored employee of the house from 1858 to a short time before his death in 1876. About this time the house was fortunate to secure the services of Mr. Thomas Allen, a figure painter, who had received his education in the Minton studios, and who, until quite recently, continued in the position of art director. Through the courtesy of the firm we are able to give an illustration of a fine tile panel painted by this artist, which gives a good idea of the original, though black and white utterly fail to convey any impression of the charm of his color scheme. One of the latest productions

of the firm is "Lindsay" ware. The pieces are of an ornamental character, but whilst good in design the color schemes are too pronounced. One is a vivid green and lilac, another, red, green and orange. It has been honored with a special mark on the back of each piece. Many of the old molds are still in existence, and of all the old factories in the district none carry us back more forcibly to the past when Wedgwood was a living, breathing personality than the old factory at Etruria, which stands much as it did, except for some few added buildings, more than a century ago. M 242.

WEERT, JEAN DE, potter of Delft in the seventeenth century. He marked I. D. W.

WEESP, Holland. The first natural porcelain manufactory in Holland was founded at Weesp in 1764. It was only in existence until 1771.

WELLER, SAMUEL A., Zanesville, O. Mr. Weller commenced business in a village near Zanesville as a manufacturer of flower pots, eventually removing to Zanesville, where he has now a very large establishment. In 1896 he purchased the business of the Lonhuda Pottery Company, of Steubenville, Mr. Long, the moving spirit in the concern, entering Mr. Weller's employment with a view of continuing the production of Lonhuda ware, though under another name. At that time, in addition to making large quantities of jardinières with colored glazes, Mr. Weller had begun to decorate his productions with paintings on the clay, executed in broad touches, but withal very effective, and which, considering his name, were not inappropriately callen Dickens' ware. Mr. Long remained only a short time with Mr. Weller, but this did not break the continuity of production of Louwelsa (as the Lonhuda ware was rechristened), which is still produced in large quantities. Some very subtle and charming effects have been produced, especially in large pieces. Turada ware, an invention of Mr. Weller, consists of pieces of varicolored clays, somber browns, orange and cream with applied ornaments of pierced work judiciously and artistically introduced. The color schemes are admirable, and the general effect pleasing in the extreme. Its distinct novelty, no less than its artistic conception and execution, makes it particularly worthy of attention. Mr. Weller is a practical and enthusiastic potter, and delights to take his turn at the bench when some problem more intricate than usual presents itself for solution. M 243.

WELLSVILLE PIONEER POTTERY COMPANY, Wellsville, O. This business was inaugurated by Morley & Co. in 1879 for the manufacture of white granite and majolica. In 1885 the business was in-

corporated under the style of the Pioneer Pottery Works Company. The works were burned down in 1890, but were rebuilt in the following spring. February 1, 1896, the company was reorganized under the present title. M 244.

WENDRICH & SONS, Copenhagen. Manufacturers of fine terra-cotta, for which they and other Danish potters are so justly celebrated.

WESSEL, LUDWIG, Popplesdorf. Mr. Wessel's charming productions are well known for the care taken in their finish and execution. They are mostly goods of ornamental character and comprise vases of graceful outline with rich and tasteful decorations, some in the well-known Louis XVI. style being particularly commendable; others are Asiatic in form and are well adapted for metal mounting. The colors are rich and of surprising variety. A decoration in ivory with gray blue shadowing from dark to light is very effective. The gold relief work is well designed and carefully executed and is a feature in the productions of the house. M 245.

WEST END POTTERY COMPANY, East Liverpool, O., organized in 1893. The company purchased the bone china works of Burgess & Co., and started the manufacture of white granite. M 246.

WEST VIRGINIA CHINA COMPANY. (See Ohio Valley China Company.)

WETHERBY, J. H., & SONS, Hanley. Manufacturers of a cheap grade of earthenware. Their trademark is a flag on which is the word "Durability," and the initials of the firm. Recently they have considerably improved the quality of their wares. M 247.

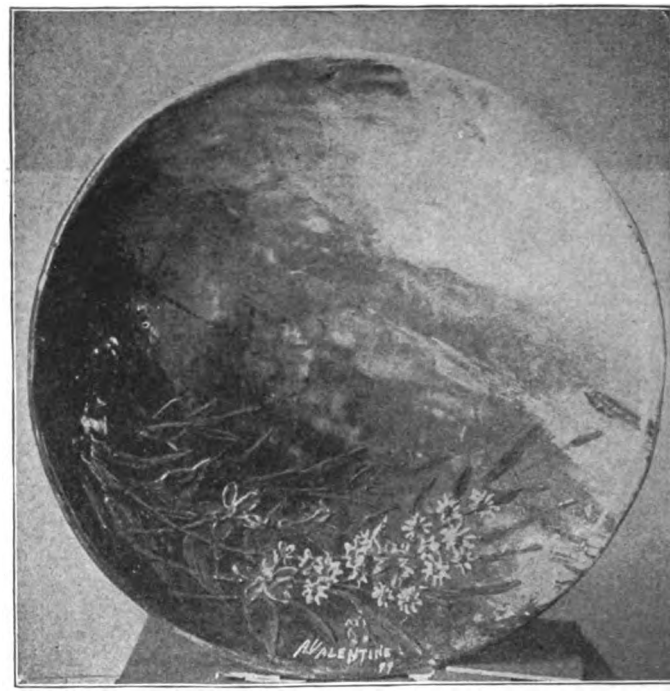
WHEELING POTTERY COMPANY, Wheeling, W. Va. Incorporated in 1879, since which the productive capacity has been increased fourfold, necessitating the building of a new factory, the "La Belle" works, and practically continues under the same management as originally composed, with Mr. C. W. Franzheim as president and general manager. The productions are extremely varied, one of their most notable successes being a rich cobalt decoration applied not only to utilitarian articles, but to jardiniéres, pedestals and other ornamental pieces. Another is Cameo china in which an ambitious attempt has been made to produce a china body of extreme thinness and translucency, and Mr. Franzheim may be fairly congratulated on having succeeded. The group shown in our illustration represents a number of new models made in this new body, decorated either in a rich flowing blue of extreme softness or enriched with hand painted designs in natural colors. At present these ornamental and semi-ornamental pieces are all that have been produced, but it is intended

to extend its use to table services, etc., in the near future. The glaze is pure and translucent, and the ware itself of such thinness as to suggest the daintiest comparisons. In jardinières and vases some clever effects were obtained in imitation of lacework, the lace itself having to be used to procure the effect. The Wheeling Pottery

Company, conscious of the merits of their productions, and at a time when American pottery had none too good a reputation, when some houses stamped their ware with an imitation of the English register mark—with what purpose it is easy to guess—boldly adopted as a motto "Made in America," and on this were content to await the public verdict. M 248.

WHEATLEY, THOMAS. Mr. Wheatley built in 1880, in Little Hunt Street, the first pottery in Cincinnati, where the ladies of the city first found their opportunity of "dabbling in clay," and which eventually made Rookwood possible. In the same year he took out a patent covering the process of decorating clay with colored slips. His first pupils were John Rittig and A. Valentine, the latter now with the Rookwood pottery, and we illustrate a plaque painted by him under Mr. Wheatley's tuition at his studio in Dayton Street, and which is dated and signed. Mr. Wheatley not satisfied with his shabby quarters built a commodious pottery at the Covington end of

the Suspension Bridge, but it was destroyed by the flood of 1884 and with it Mr. Wheatley's fortunes and hopes. He then drifted about the country, sometimes as an author, sometimes as an actor, but pot-



tery had too great a charm for him to be long separated from it and he went to Zanesville, we believe to S. A. Weller. His stay here was, however, short, and he eventually returned to Cincinnati and resumed in a small way the manufacture of clay painted ware.

WHIELDON, THOMAS. At the time that Whieldon commenced business the manufacture of the beautiful salt glaze wares of Staffordshire was in danger of extinction through the underselling of the different potters and the consequent deterioration of the ware, which in place of the thinness that had distinguished it had become coarse and clumsy. Whieldon, in his modest thatched-covered pottery at Fenton, resisted this retrograde movement. The exact year in which he commenced business is unknown, but it was some time prior to 1740. How modest this business was at the commencement may be judged from the fact that he shouldered his samples in a pack, and walked from town to town soliciting orders. He first made small pieces for hardware men—snuff boxes that were mounted in metal

at Birmingham, and agateware knife handles for the Sheffield cutlers. To these, as his business increased, he added the manufacture of table and tea ware, mostly tortoiseshell, for which he acquired a great reputation—so much so that, although similar goods were made by a number of other manufacturers, it has since been generally known as Whieldon ware. The best workmen to be found in the district were employed by him, and it is a criterion of his judgment and an evidence of his ability in training that many of his apprentices in after years made reputations of their own as potters, which not only enriched them, but perpetuated the fame of their employer and maintained the prestige of the district. Among these may be mentioned Josiah Spode, Robert Garner, J. Barker and W.

AGATEWARE.

Greatbach. In 1749 he built large additions to his works and considerably increased the scope of his manufacture. He made black glazed tea, chocolate and coffee pots, and also many of those with crabstock handles, and spouts of leafy forms, with green and mottled glazes. His beautiful octagonal plates and perforated double teapots have never been surpassed, the deep, soft glaze being "at once the admiration of modern collectors and the despair of modern potters." (See Tortoiseshell.) He also made large quantities of pineapple, maize, melon and cauliflower ware, the modeling of which was excellent. (See Cauliflower.) The perforated double teapots were made in a double shell the outer one being pressed with a design of leaves and apple blossoms, the cutting covering the shape with a sort of lacework, very light in appearance, and the peculiar tints of tortoiseshell ware impart to the whole a look of originality, although

but copies or adaptations from Oriental originals. The process has been revived several times since Whieldon's days, and always given out as a new invention. Recognizing the abilities of the rising young potter, Josiah Wedgwood, Whieldon in 1754 made a partnership agreement with him for five years, with the result that still further improvements were made in his bodies and glazes, and a new and beautiful green glaze was added to his decorations. In 1759, on the termination of the partnership, Whieldon retired from business, his honest efforts having had their reward in the accumulation of a considerable fortune. He built a handsome house near Stoke, where he long continued to enjoy the fruits of his industry. He was greatly esteemed for his charity and benevolence, was made sheriff of the county of Stafford in 1786, and died in 1798 at a very advanced age.

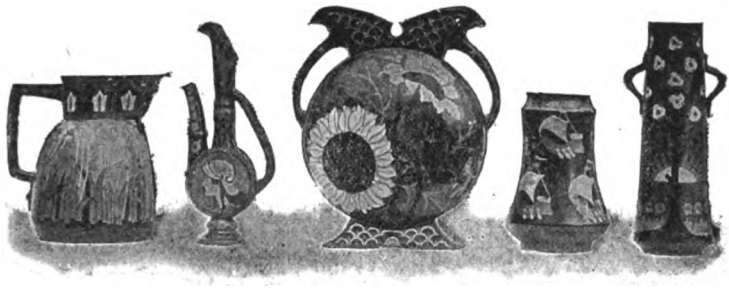
WHISTLES. The Peruvian made whistles in the form of birds. A similar one is in the possession of Mr. A. True, which is said to have been made in this country in Revolutionary times for the purpose of whistling the British out of New York. They were also largely made in more recent years both in England and Germany.

WHITE CHINESE PORCELAIN. By this is understood not plain white china, but china decorated with designs engraved in the paste or painted in relief. The best was made during the Song dynasty (960-1278). Tcheou, a celebrated Chinese potter who lived between 1567 and 1619, is said to have imitated this old white china so cleverly as to deceive the most expert.

WILEMAN & Co., Foley Potteries, Longton. This enterprising pottery was originally owned by J. F. Wileman, who made common

earthenware for the Colonial market. He was afterward joined by J. B. and Percy Shelley, and they commenced making a very good quality of china. Mr. Wileman retired from the business, and the death of Mr. J. B. Shelley left Mr. Percy Shelley, B.A., the sole

proprietor. He makes now only fine china and art faïence of the most modern and finished character, known under the names of Intarsio, Urbato, and Spano-Lustra, for which Mr. F. A. Rhead is responsible. Under Mr. Shelley's active management the works



have been considerably enlarged, artists of repute engaged and a somewhat rude manufacture raised to one of really artistic merit. Intarsio ware is executed under the glaze entirely by hand, the designs showing a wonderful fecundity of invention. Urbato ware is in the nature of the Italian sgraffito, but with the difference that sgraffito is usually in two colors, superimposed one on the other, whilst in Urbato ware a third color is used, to which frequently other colors are added with the brush. The Spano-Lustra ware is similar to this, but is sgraffito work in one or two colors only, to which is added an applied luster. M 249.

WILHELMSBURGER STEINGUTFABRIK, Wilhelmsburg. Manufacturers of stoneware, established 1835.

WILKINSON, A. J., & Co., Burslem. Manufacturers of earthenware. They succeeded Richard Alcock. The semi-porcelain made by this house is of good quality, and the shapes and designs are always distinguished by originality. M. 250.

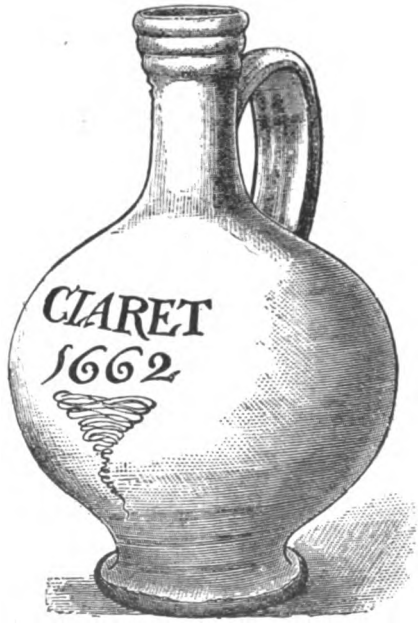
WILLETS MANUFACTURING COMPANY, Trenton, N. J. This is one of the oldest factories in Trenton, having been erected by Wm. Young & Son in 1853. The present firm succeeded to the business in 1879. Wm. Bromley, after being with Ott & Brewer, went there to introduce the manufacture of Belleek, which is still extensively carried on. The principal production, however, consists of staple lines, such as dinner and toilet ware with printed decorations. M 251.

WILLOW PATTERN. This familiar pattern is an adaptation from a Chinese design, and it is claimed was first produced at Caughley, the engraver being Thos. Minton, the founder of the well-known

house at Stoke. It has served as a theme for many writers, who have immortalized it in prose and verse. The legend is as follows: "The mandarin had an only daughter Li-chi, who fell in love with Chang, her father's secretary; and he lived in the island cottage at the top of the plate. The mandarin forbade the match and the lovers eloped, and lay concealed for a time in the gardener's cottage, from thence made their escape to the island home of the lover. The father pursued them with a whip, and would have beaten them to death had not the gods changed them into turtle doves. At the time of the elopement the willow shed its leaves."

WILSON, C. In 1787 Wilson was a partner with J. Neale, who eleven years earlier had united in partnership with Palmer. They were unscrupulous imitators of Wedgwood's productions, procuring specimens from his London showroom for reproduction. Wilson appears afterwards to have succeeded to the business. His trademark, when he used one, was a crown and his name.

WILTSHAW & ROBINSON, Stoke-upon-Trent. Manufacturers of earthenware. Their trademark is a swallow inclosed in a double circle in which is "W. & R., Stoke-on-Trent," the whole surmounted by a crown. M 252.



WINE POTS. The early productions of Lambeth Delft ware consisted, as far as we know, mostly of wine pots, large dishes and posset pots. The former were mostly pint and half pint, and had the name of the wine they were intended to contain and the date of manufacture—or, possibly, of bottling—in blue letters on the stanniferous enamel, but under the thin lead glaze. They are usually inscribed "Whit Wine," "Whit," "Sack" and "Claret," and date from 1641 to 1663.

WINTERGURST. From 1620 to the present century this family has made fine faïence at Schreitzheim, Würtemberg. Dishes in the form of animals, vegetables, etc., are a characteristic production.

WINTERTHUR, Switzerland. Faience was made here the end of the seventeenth century. It is similar to Italian—deep-bordered dishes with fruit, flowers or arabesques running around the margin, and escutcheons or fortified castles forming the center decoration. The drawing is precise and stiff.

WIRKSWORTH, Derbyshire. In 1770 a potter named Gill made here similar wares to those of Nottingham, and later poorly painted china.

WITSENBURG, CORNELIS, master potter of Delft in 1696. His products, now rare, are beautiful in execution, and are decorated in camaieu blue. They are marked with the initials C. W.

WITSENBURGH, THEODORE, master potter in Delft about 1690, where he was established at the Sign of the Star. His faiences were remarkably beautiful, especially his plaques surrounded by a framework in relief, which, according to Mr. Henry Harvard, may be classed among the most beautiful of Delft ceramics. They are marked with a star.

WITTENBERGER STEINGUTFABRIK, Wittenberg. Stoneware. Established 1884.

WOLFE, THOS., Stoke-upon-Trent, potter at the end of the last century. He died in 1818, and was succeeded by his son-in-law, Robert Hamilton. The firm afterwards became Wm. Adams & Co.

WOLFSOHN, Dresden. About the middle of last century Wolfsohn adopted the old Meissen mark of the caduceus and the monogram A. R., and continued to use it until stopped within recent years by litigation. Many thousands of pieces bearing this mark were issued which have only, of course, a commercial value. The factory now uses as a mark the letter D surmounted by a crown.

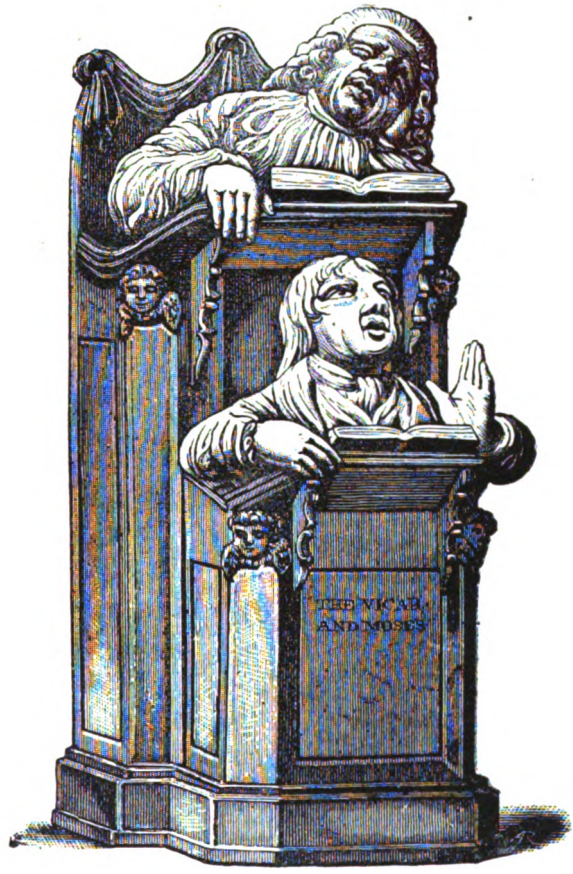
WOOD, AARON, was apprenticed in 1731 to Dr. Thos. Wedgwood, of Burslem. He attained a great reputation as a block cutter and mold maker, and enjoyed the privilege of working in a room by himself, where he remained locked up all day by his employer. He afterwards (1736) worked for John Mitchell, and for Whieldon, when in partnership with Wedgwood (1754-9). In conjunction with Wm. Littler, employing for the first time oxide of cobalt as a ground, he made the first blue salt glaze, which was said to resemble the finest lapis lazuli. He was the son of Ralph Wood (*q. v.*)

WOOD, ENOCH, son of Aaron Wood. It is seldom that three successive generations furnish such three representative men as Ralph, Aaron and Enoch Wood. The latter commenced business on his own account in Burslem at the old Swan Bank in the year 1783. In 1790 he was joined by James Caldwell, and the firm became Wood

& Caldwell. This continued until 1818, when the firm was changed to Enoch Wood & Sons. Enoch, one of the sons, also dealt in borax, and amassed quite a fortune. On his withdrawal from the firm there was but little capital left, and the other brothers went out of business (1846). They occupied works known as the Fountain Place Works, and the family resided at Fountain Place House, adjoining the pottery. There were some good pieces of modeling in the house, notably a large piece in one of the halls representing the Crucifixion. Enoch Wood made a number of busts and groups, the best known of which is the bust of Wesley, made soon after he commenced business, and probably modeled by him while working for Palmer, of Hanley. The best of the American historical pieces in an inimitable deep blue ware produced by E. Wood & Sons. (See Historical Earthenware.) Enoch Wood was not only an intelligent potter—he was an enthusiastic and intelligent collector of all Staffordshire wares, and to his well-directed efforts we owe much of our knowledge of early Staffordshire pottery. Many pieces are rendered still more valuable by the copious notes accompanying them. The collection remained intact until 1835, when no less than 182 of the choicest specimens were forwarded by Mr. Wood to the King of Saxony, and are now in the Dresden Museum. The rest of the collection has been dispersed, but a large part of it was secured by the English Government, and is now divided between the museums of Edinburgh, Dublin and London.

Wood, Ralph. The first of this name of whom we have any record was a potter of Burslem in the eighteenth century. He was the father of Aaron Wood, the mold maker, and grandfather of Enoch Wood, "the Father of the Potteries." One of his pieces is a bust of Washington in cream-colored ware. He issued quite a number of groups and statuettes, the best known of which are "The Vicar and Moses" and "The Vicar and his Clerk," the former of which we illustrate. He also made a granite or porphyry ware, which was made by attaching to the earthenware surface small fragments of differently colored paste, smoothing the surface and glazing the whole. It resembled a polished piece of porphyritic rock with imbedded crystals. His pieces were frequently stamped in the clay "Ra Wood, Burslem." A teapot and cover in the form of an

elephant and castle, with the arms of the city of Coventry and a figure of a monkey seated astride the cover, sold at the Hamilton Palace sale for £19. A unique example of this eminent English potter.



WOOD, WILLIAM, son of Aaron and brother of Enoch Wood, born 1741 and died prior to 1821. Most of the useful articles made at Etruria are from models and molds of his production. He had been engaged at £53 per year and gradually advanced to £70, and it is hardly to be wondered at that he fell into debt on such a munificent salary. Byerley, in an interesting letter, writes: "A few days ago he spoke to me, saying he was in debt about £30, part to his brother and £10 or £12 for malt; that he could not do without malt liquor in the house; was ashamed to go for that he had none, and more until he had paid off the old score." Byerley describes him as being in great distress and fearful of ending his days in the workhouse, and that he petitioned for £106 pounds a year, double his original wages, as the cost of living had increased twofold. We are glad to say his petition was granted, and, cheered by his "malt liquor," he served the Wedgwoods well and faithfully until his death.

WOOD & SON, Burslem. Manufacturers of earthenware. M 164.

WOODALL, WILLIAM, M.P. Mr. Woodall, son of William Woodall, of Shrewsbury, was born in 1832. The project of a memorial of fitting character to Josiah Wedgwood had been mooted, but was threatened with extinction when Mr. Woodall became hon-

orary secretary to the movement; and it was almost entirely to his unremitting zeal that the project, after six years of incessant labor, found fulfilment in the present Wedgwood Institute. In 1862 he married the daughter of the late Mr. James Macintyre, a prosperous manufacturer of Burslem, and in 1867 became a member of the firm. Taking always an active interest in the affairs of the town, his shrewdness in business matters, the polish and suavity of his manner, his kindly consideration for his workmen, his unceasing labors to further the cause of education, won him the respect and admiration of his neighbors, the love and trust of his employees, and when in 1880 he was selected as the Liberal candidate to contest the Borough of Stoke-upon-Trent, he wrested the seat from the Conservatives, he and his colleagues being returned by overwhelming majorities. He continued to represent Stoke until 1885, when, owing to the redistribution of seats, Hanley and Burslem were formed into one parliamentary borough, which he represented until his death. Mr. Woodall has also distinguished himself in literature, his book, "Paris After Two Sieges," having been most favorably received. A series of articles, among his other contributions to literature, entitled "On Western Ways," embodied his impressions of winter travel in the United States. Mr. Woodall died April 8, 1901.

WOODVILLE, or WOODEN BOX. Situated about five miles from Burton-on-Trent, Derbyshire. The name arose from an old wooden box or hut which formerly stood on the site of the present toll-house, where a man used to sit and collect tolls, but which was afterward burned down. The original box was an old port wine butt from Drakelow Hall, and in this the collector, Diogenes-like, spent his days. In 1800 Woodville boasted of two houses only—the Butt house, belonging to Lord Ferrars, and the residence of his son, Lord Tamworth, and a farm house. On this land valuable beds of clay were found, and a Mr. Peake, from Staffordshire, established a small factory. In 1790 James Onions built the Hartshorne Pottery. He was succeeded by Luke Copeland. It was next carried on by Read, Malkin & Co., who were succeeded by G. S. Read, who carried it on up to 1860, when it passed to the present owner, J. B. Rowley. The Woodville potteries were established in 1810 by Mr. Watts, who was joined in partnership with Mr. Cash. The firm is still known as Watts & Cash. The Hartshorne Pottery was established in 1818 by Joseph Thompson, father of the present proprietors, Richard and Willoughby Thompson, who trade as Thompson Brothers; the Wooden Box Pottery was founded in 1817 by Thomas

Hallam; the Poole Works about 1830, by Joseph Walker Bourne; the Woodville Pottery in 1833 by Thomas Hall and William Davenport, and the Rawdon Pottery was built by the fourth Marquis of Hastings. The staple production of this group of potteries consists of Rockingham, yellow, and a buff or cane ware. It was from this district that the Bennetts, who were the first potters in East Liverpool, came.

WOODWARD, BLAKELEY & Co. were among the early potters of East Liverpool, Ohio. They were succeeded by Vodrey & Bro.

WORCESTER. The Worcester Porcelain Works, or, as originally termed, the "Worcester Tonquin Manufacture," were the direct result of the experiments of Dr. John Wall, a chemist of much practical ability, aided by Mr. William Davis, an apothecary. These experiments were conducted, not with a view of founding a manufactory, but from a pure love of science. Mr. Binns tells us that at that time political rivalries ran high in the city of Worcester, and that the expense of contested elections was very great. The Georgian party were anxious to withstand the Jacobites, and in order to increase their voting strength they resolved on a manufactory of some description. They came into contact with Dr. Wall, who was politically in sympathy with them, and the scheme for a porcelain works was launched. Although the secret of the manufacture of hard porcelain had spread from Meissen to different places on the Continent of Europe, it had not yet penetrated to England, nor could the Continental productions have been well known, Oriental china having inspired the Bow and Chelsea works, as it did that of Worcester. Even had the case been otherwise, Dr. Wall had no natural clay to work with, and so composed a frit with which he first mixed pipe clay and afterward steatite. From the partnership deeds we learn that two workmen, R. Podmore and John Lyes, who had been employed for some time by the inventors of Worcester porcelain, were to receive extra remuneration, "the better to engage their fidelity to keep such part of the secret as may be entrusted to them." Precautions almost as rigid as those adopted at Meissen were taken to prevent the entrance into the works of inquisitive visitors. No strangers were to be admitted into the factory, which was to be carried on with the greatest privacy and secrecy. Even the keys of the inner and outer doors were not to be kept by the same guardian. The practical manager was William Davis. The works were near St. Andrew's Church, on the side of the River Severn. The building was formerly known as the Wamstry House, and had formerly belonged to Lord Windsor. It is now part of Dent's glove

factory. The early productions of the works were copies or adaptations of blue and white Nankin patterns, and were distinguished for their simplicity, though the body had a somewhat cold and coarse look. In 1756 the invention of printing on biscuit ware was practiced at Worcester, having been brought there by Robert Hancock, who had been an engraver under Ravenet at Battersea, where the process had been applied to enamels by Mr. Alderman Jansen. The new process was used not only for decorative but for political purposes, Thomas Carlyle referring to a mug with a portrait of the King of Prussia as "a mug got up for the temporary English enthusiasm and the accidental instruction of posterity." It was possibly this same mug that led to the newspaper controversy as to the authorship of the process. It inspired a long poem in the *Gentleman's Magazine* for December, 1757, which was dedicated to Josiah Holdship, who, with his brother Richard, owned about one-fourth of the capital of the company, and contained this couplet:

> "What praise is thine, ingenious Holdship, who
> On the fair Porcelain the portrait drew."

The Worcester *Journal* in January, 1758, reprinted this poem with some alterations, and, knowing that Holdship had little or nothing to do with the production, the editor appended the following:

"Extempore on the compliment of imprinting the King of Prussia's bust being ascribed to Mr. Josiah Holdship:

'Hancock, my friend, don't grieve, though Holdship has the praise.
'Tis yours to execute, 'tis his to wear the bays.'"

The early transfer prints are noticeable for their fine engraving, which sensibly deteriorated as the practice of coloring them increased. The early blue and white china printed under the glaze, and the black, or, as it was called, "jet enameled," lavender and brick red printed on the glaze, show not only very fine workmanship, but a freedom and gracefulness which make them really works of art. These latter seldom bear a trademark, but in a part of the picture the name of the engraver occasionally appears—usually that of R. Hancock. Richard Holdship became bankrupt in 1761, and sold his shares for five shillings, and carried the secret of printing to the Derby Works. In 1769 Hancock purchased from the mortgagees of Holdship the buildings he had erected, and became a partner, but the partnership only lasted until 1774. About the year 1764 many Chelsea workmen went to Worcester, and with their assistance the finest Worcester work was produced—much of the work highly

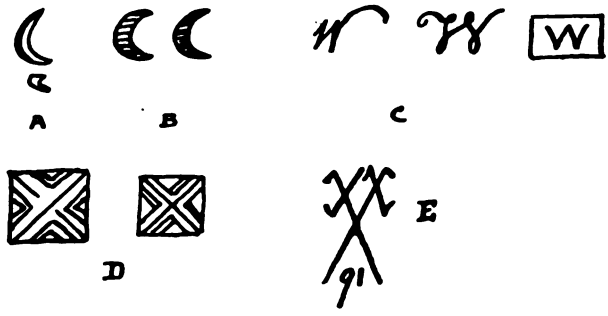
decorated services and vases bearing unmistakable evidences of the style of Chelsea. The coveted apple-green of Sèvres and the rich *bleu-de-roi* ground with salmon-scale markings, the exotic birds of brilliant plumage, the elaborate but tasteful gold borders, in the words of Mr. Binns, "all bear evidence of a cultivated taste; the designs and combinations were not haphazard, but were made with judgment. It is this fact, more than fashion or caprice, which causes old Worcester to command such high prices in the market. The designs are rich and elegant, and the work is always good." We give an illustration of a vase which is a combination of the blue salmon-scale ground, rich gilt bordering and painted tropical birds. A set of three of these vases is today worth worth from $750 to $1,000. Dr. Wall died in 1776, and the remaining members of the original company continued the manufacture until 1783, when they disposed of their works to their London agent, Mr. Thomas Flight, who placed his two sons, Joseph and John, in charge In 1788 King George III., with the three princesses, visited the factory, and gave Messrs. Flight the liberty they had requested of styling themselves "China Manufacturers to their Majesties," at the same time giving some additional orders for china. The Worcester Works thus gained the title of Royal Porcelain Works, by which they have ever since been known, the last royal warrant having been granted by

Queen Victoria in 1883. The service executed for George III., the first of a long series of royal services, had a band of royal blue, upon which is drawn in gold a design comprising the emblematical flowers of Great Britain—the rose, thistle and shamrock—in panels of oak leaves. Between the panels are sprays of laurel, also in gold, and the center is decorated with the royal arms beautifully painted. Mr. John Flight died in 1791, and two years later Mr. Martin Barr became a partner, and the style of the firm was Flight & Barr. This lasted until 1807, when it was changed to Barr, Flight & Barr, which lasted until 1813, to give place to Flight, Barr & Barr, the last phase of the firm of the original Worcester company. Professor Church says: "The artistic decadence of the ware began during this period (1783-1793) although the pottery and workmanship remained excellent. But the heavy, pseudo-classic forms, the labored painting and the exuberant gilding that were then in vogue gradually displaced the last traces of the grace, freedom and simplicity of the earlier time." In 1786 Robert Chamberlain, the first apprentice the Worcester company ever had, commenced business on his own account and soon built up a very considerable trade. The old firm, owing to his vigorous competition, seemed in danger of extinction, and the two firms were amalgamated in 1840. This partnership was dissolved in 1847, the original factory being closed. In 1850 Mr. F. Lilly and Mr. Kerr became partners, and they were joined in 1852 by Mr. R. W. Binns, when the firm name became Kerr & Binns, Mr. Chamberlain retiring. In 1862 Kerr & Binns disposed of their business to the present joint

619

stock company—"The Worcester Royal Porcelain Company Limited." Mr. Kerr retired, and to Mr. Binns was intrusted the position of art director—an office he honorably filled until June, 1897, when, although retaining his seat on the board, he retired from active management. Three different bodies have been used at Worcester—the Tonquin porcelain previously mentioned, the Regent, about 1812, which had whiting and pipeclay added to the original body, and ivory porcelain about 1850, which is a bone china. Mr. R. W. Binns, about 1854, was enabled to show specimens of enamels executed by the late Mr. Bott, an artist of very considerable talent, and who had been specially trained for the work. These were veritable triumphs of pottery, and specimens to-day are worth a hundred times their original cost. We illustrate a tazza painted by this artist. While speaking of values we may here mention that the services made for the Prince Regent, afterward George IV., cost over $20,000; and this was exceeded by a service made for the Honorable East India Company, the charge for which was something like $21,000. Mr. Binns also introduced ivory porcelain, which forms an excellent basis for all kinds of ornamental decoration. The jeweled ware which Mr. Binns brought to such a high point of perfection is superior to that of Sèvres, as the jewels form an integral part of the piece, unlike that of Sèvres, which are but paste jewels fitted into receptacles left for that purpose. In the Japanese style some very successful pieces have been produced, a notable example being a set of vases representing the potter's art which are painted with such minuteness that a good lens has to be used to bring out their beauty. They were painted and gilded by Mr. Callowhill, the modeling of the pieces being by Mr. Hadley. About the year 1803 a manufactory of porcelain was started by George Grainger, who excelled in pierced work, and who also made a semi-porcelain vitrified body of excellent quality. The works were carried on by direct descendants of the founder until 1889, when they were taken over and are still operated by the Worcester Porcelain Company. The numerous imitations of the Worcester ivory body and its inherent style have caused a marked falling off in the United States of its consumption; and though the workmanship and finish are all that could be desired, and the paste the perfection of the potter's art, it could not stand the competition of unscrupulous rivals, who, with models and designs furnished at the cost of a single piece, greatly undersold the original house, and, regretful as may be the fact, forced Worcester ivory out of the market. It is hardly practicable here to give a complete list of Worcester marks,

but they may be briefly summarized: Of the early marks, to which no exact date can be ascribed, the open crescent (A) is usually in blue under the glaze; the solid or ruled crescent (B) is generally found on blue printed ware; a capital E is sometimes placed in the hollow of the crescents; of the W mark (C) five or six varieties have been noted, and are in blue, of fair size, under the glaze; of the square marks (D), a copy of a Chinese seal character, there are four or five varieties, the two given being the most usual form;



there is also an imitative Dresden mark (E) with the figure 9 or 91 between the points. These marks all belong to the period from the foundation of the works up to 1783. From this date the various firm names were used, or simply "FLIGHTS," sometimes surmounted by a crown. Chamberlain's wares (1786 to 1852) were also marked with their name, often with the London address added. Kerr & Binns used the familiar quatrefoil of W's in a circle from 1852 to 1862, when a crown was added to it, constituting the present mark.

WREDE. A German who is said to have made stoneware at Bristol early in 1700.

WRIGHT, JOHN. A potter of Staffordshire whose name is found on slip dishes dated 1707.

WRIGHT, S., Shelton, Staffordshire, obtained a patent in 1830 for the reproduction of encaustic tiles. This was the patent worked by Herbert Minton.

WROTHAM, Kent, contests with Staffordshire the employment of slip decoration for objects of any degree of importance. The earliest known piece is a jug in the Maidstone (Kent) Museum, dated 1656. The ware was formed of a red clay covered with a white layer cut through to form the ornament, and with spots of raised slip, frequently accompanied by inscriptions in raised letters, such as W CR WROTHAM RS 1659 on a piece in the Baldwin

collection, and IE : WE 1699 : WROT : HAM on a very large dish in the British Museum. The initials I. E. probably stand for John Evelyn, cousin of the author of "John Evelyn's Diary." The whole is covered with a yellow glaze. As a rule, the Wrotham slip is more elaborately, or, at least, more variously, ornamented than that of Staffordshire, as represented by the most famous of its workers in slip decoration.

X

XANTO, FRANCESCO, a native of Rovigo, settled at Urbino and there produced all his works. His true name, gathered from the pieces he signed, seems to have been Francesco Xanto Avelli da Rovigo, and the dates of his signed works extend from 1530 to 1542, though he was probably working both before and after these dates. Many of his pieces were sent to the botega of M. Giorgio, to be enriched with metallic reflect. Of Xanto's ability as an artist there is among critics a great diversity of opinion, some placing him at the head of the then-existing artistic movement in Italy. Others, while acknowledging his ability to skilfully arrange the groups he took from the compositions of other artists, severely attack his original works, which they stigmatize as monotonous and mechanical, coloring crude and positive, and full of violent opposition, redeemed only by a certain force and brightness of aspect. (See also Urbino.)

XHRONET, an artist of Sèvres, who invented the beautiful rose color known as Rose du Barry.

Y

YANAGAWA WARE. This is a species of terra-cotta from a factory in the town of Yanagawa, province of Chikuzen (Japan), founded in the period Keicho (1596-1615), and still in operation.

YASUJIRO, IKEDA, Arita, in 1837 made a very thin, paper-like and glossy translucent porcelain known as eggshell. Small pieces only were made, turned on the potter's wheel. In later years it has been painted with enamels of various colors and largely exported. The material comes from the Island of Amakusa, or Goto, and is softer and tougher than that from Idsumi-yama.

YATSU-SHIRO WARE, made at the village of Shirno Toyoharo, near the town of Yatsu-hashi, province of Higo, Japan, where the factory was founded about 1624 for the purpose of producing ware

similar to Satsuma. It is of a hard porcelain, composed of gray clay, and decorated by inlaying white clay in a small design. It is so fine and in such good taste as to meet with universal approval. Unfortunately, the art perished with the maker, and such fine results cannot now be obtained.

YEBIS, one of the seven divinities of Japan, and often found as a *motif* on ceramics. Yebis was brother of the sun—the god of daily bread—represented as a fisherman, occasionally with a large fish attached to his rod, fish being the favorite food of the Japanese.

YEDO BANKO WARE. About 1652 a potter named Banko Kichibei, established a kiln near Tokio, the products of which somewhat resembled Satsuma, and are now known as Yedo Banko. This manufactory has been discontinued, and the articles known in foreign markets as Banko ware are made principally at Kuwana and Yokka ichi. The Kuwana factory was founded about 1850 by a porcelain maker named Yiusetsu, who assumed the name of Banko. He was living as late as 1880, although too old to work. The product consisted of a peculiar kind of stoneware, generally unglazed. Hashimoto Chiuhei studied with Yiusetsu, and established a kiln at Kawasaki, where he produces similar ware from materials found in the vicinity. His work is not equal to the original. There is also another kind of Banko ware called Banko Celadon, which is very brilliant, and unlike the Chinese. Its manufacture has been discontinued.

YE-KARATSU, viz., painted Karatsu, made about 1590. The designs, resembling the Corean, but not glossy, were under the glaze.

YOHEI, SEIFU, a potter of Arita producing principally ware of the Sometsuke class, but also vases and ornamental pieces in various colored enamels.

YOJIBEI, a manufacturer of Karatsu ware about the end of the seventeenth century.

YONE-HAKARI, or Rice Measure. The Japanese name for a large bowl for measuring rice, beans, etc., in use before the exact measure of capacity had been fixed by the Emperor Mommee, A. D. 702.

YORKSHIRE. (See also Leeds). Slip ware was made in Yorkshire in the seventeenth century, and a certain Wedgwood was a potter at Yearsley, as we glean from the traditionary distich:

> "At Yearsley there was pancheons made
> By Willie Wedgwood, that young blade."

There are now numerous potteries in Yorkshire, at Bradford, Ferrybridge, Hull, Leeds and other places, but the production is gen-

erally of the cheaper kinds of earthenware, and do not call for particular mention.

YOSHIDAYA. About 1804 to 1817 he erected a kiln at Yamashiromura, and made great efforts to restore the ancient manufacture of Kutani ware.

YOSOBEI, MIDSUKOSHI, in the beginning of the present century commenced to make Sometsuke porcelain in imitation of Arita ware from clay imported from Idsumi-yama in Arita, province of Hizen.

YOUNG, W., & SONS, Trenton, N. J. Founded in 1853, and they were the first house in Trenton to make cream color ware. The factory is now known as Willet's (*q. v.*).

YUZAN, a present-day Japanese potter of Kutani.

Z

ZAFFRE, a purplish color obtained from cobalt. It was probably first used in Staffordshire by T. Heath, of Lane Delph, in 1710.

ZAFFARINO, a celebrated artist of Ferrara, Italy, at the beginning of the sixteenth century.

ZELL. There appears to have been a pottery at Zell as long ago as 1560, founded by a grandson of the Duke of Hanover, from whom the English Royal House of Brunswick was descended.

ZENGORA, REYOZEN, the tenth generation of that name, early in the present century commenced making porcelain in Kioto, the trade having previously consisted of earthen braziers. He most skilfully reproduced the old wares, both of China and Japan. The Prince of Ki, of the family of the Shogun, honored the manufacturer with the title of Yeiraku, which he adopted as his family name and even applied to articles he made—hence the appellation of Yeiraku Kinraute. Zengora Hozen (twelfth generation) settled, about 1862, at Kutani, province of Kaga, and did much toward encouraging and instructing the manufacturers of that district in the method of making and decorating porcelain. The present maker (thirteenth generation) by reason of his great talent has completely sustained the family fame. His work still outrivals the best productions of the Kutani factory.

ZEZE WARE. This ware is produced in the small town of Zeze, near Lake Omi (Japan). The factory was founded about 1644 for the purpose of making tea utensils on a large scale. They consisted of a kind of stoneware, the glaze very closely resembling the Ko-Seto. There is still a small kiln in operation.

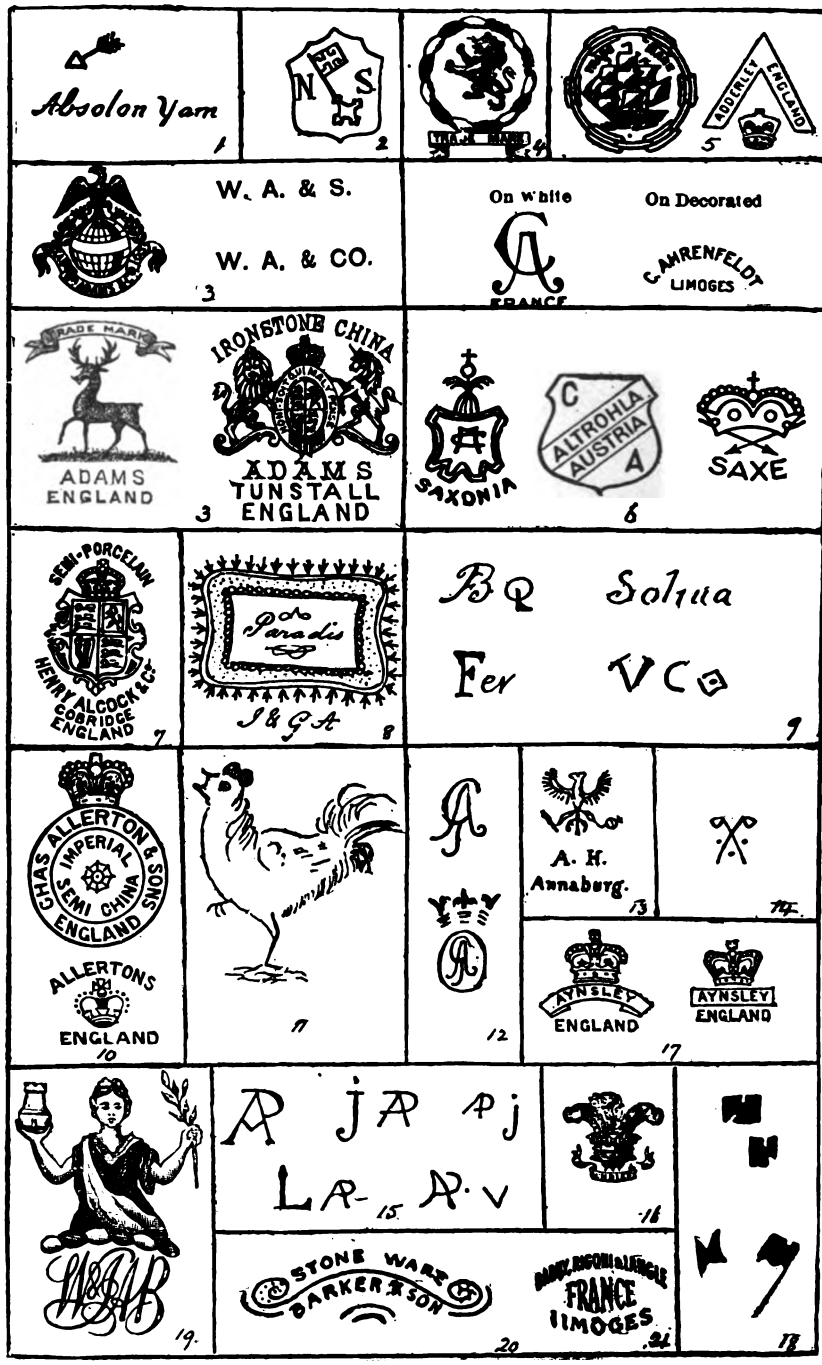
ZIEGLER, CLAUDE LOUIS, a pupil of the celebrated painter, Ingres, through impaired eyesight, had to relinquish his art, and in about the year 1840 entered into a partnership with a stoneware manufacturer at Voisinlieu, near Beauvais, with a view to restore to the manufacture of stoneware some of its former artistic character. Ziegler gave a truly artistic direction to the establishment, the stoneware manufactured by him and for which he supplied the models being remarkable for the purity of form, the style of decoration, as well as the fineness of the body and excellence of workmanship. One of his finest works is the large vase known as Vase des Apôtres, the cover of which supports a figure of Christ in the round, while the sides of the vase are ornamented with figures in relief representing the twelve apostles. This vase, severely conceived and executed, may justly be considered as one of the best productions of modern art. The salt glaze of this piece has a uniformly brown color. Ziegler also made stoneware ornamented with enamels imitated from stoneware of the sixteenth century, which was not so successful as his original work. After his retirement the manufacture he had founded ceased to produce artistic pottery, and finally disappeared in 1854.

ZONAN, ANTONIO, is said to have been making majolica at Mantua at the end of the fifteenth century.

ZOROKU, MASHIMIDSU, a manufacturer of porcelain, Awata, in the eastern district of Kioto.

ZSOLNAY, W., Fünfkirchen. This manufactory was established in 1885 and quickly rose into prominence, the five churches mark being regarded as a guarantee of excellence. The works are large, employing about a thousand hands. Mr. Zsolnay seems to have obtained complete control over the metallic lusters and uses them in any way he seems to think proper. Greens, purples and blues shot with gold are all obtained and with the utmost brilliancy, and to these he has added a most wonderful red, which is almost, if not quite, a scarlet. Other noteworthy productions are slabs six feet long and three feet wide, which he manages to obtain quite straight and on which are painted religious subjects. These immense slabs are principally used in the decoration of churches. Colored glaze tiles, statuary, perforated vases, &c., are also produced and Mr. Zsolnay has fully demonstrated the possibilities of transforming the commonest clay into works of high artistic merit. M 382.

ZURICH (Switzerland) was renowned in the eighteenth century for its manufactories of faïence stoves. There are also attributed to this town faïences of polychrome decoration rather weekly drawn in black. They are marked B. Z.


Absolon Yarn
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W. A. & S.
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On white
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CAMRENFELDT
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TRADE MARK
ADAMS
ENGLAND
IRONSTONE CHINA
ADAMS
TUNSTALL
ENGLAND
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SAXONIA
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ALTROHLA
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SAXE
SEMI-PORCELAIN
HENRY ALCOCK & Co
COBRIDGE
ENGLAND
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Paradis
I & G A
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Solua
Fer
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CHAS ALLERTON & SONS
IMPERIAL
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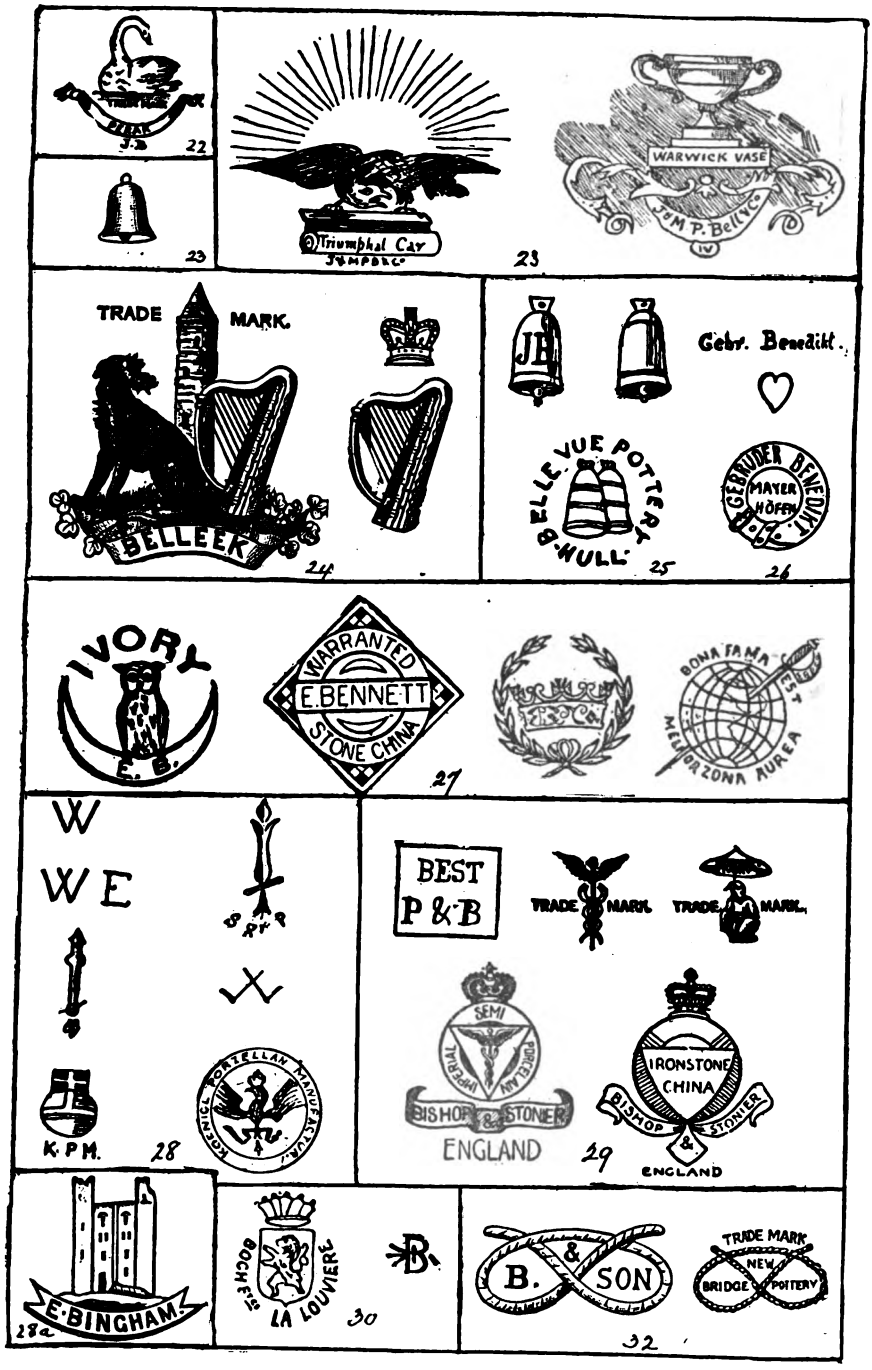
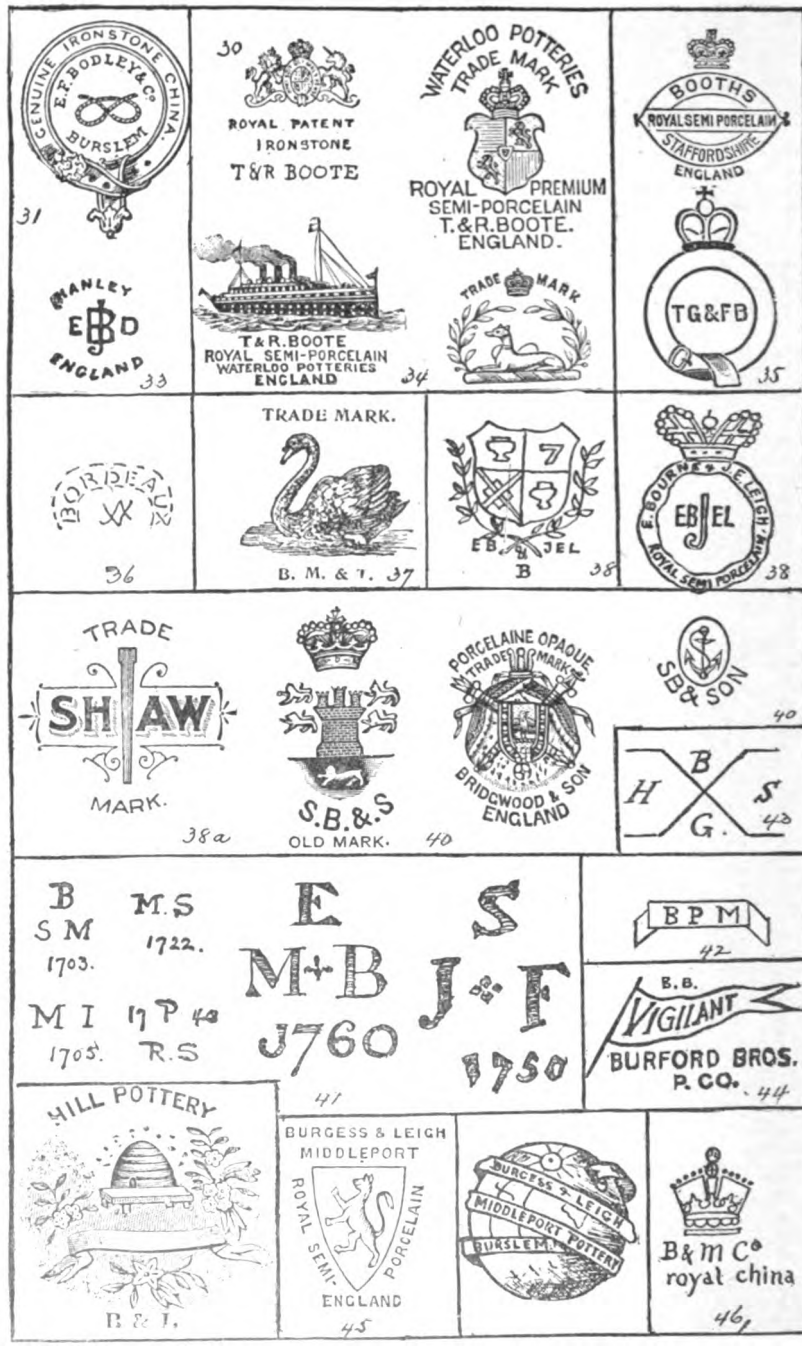
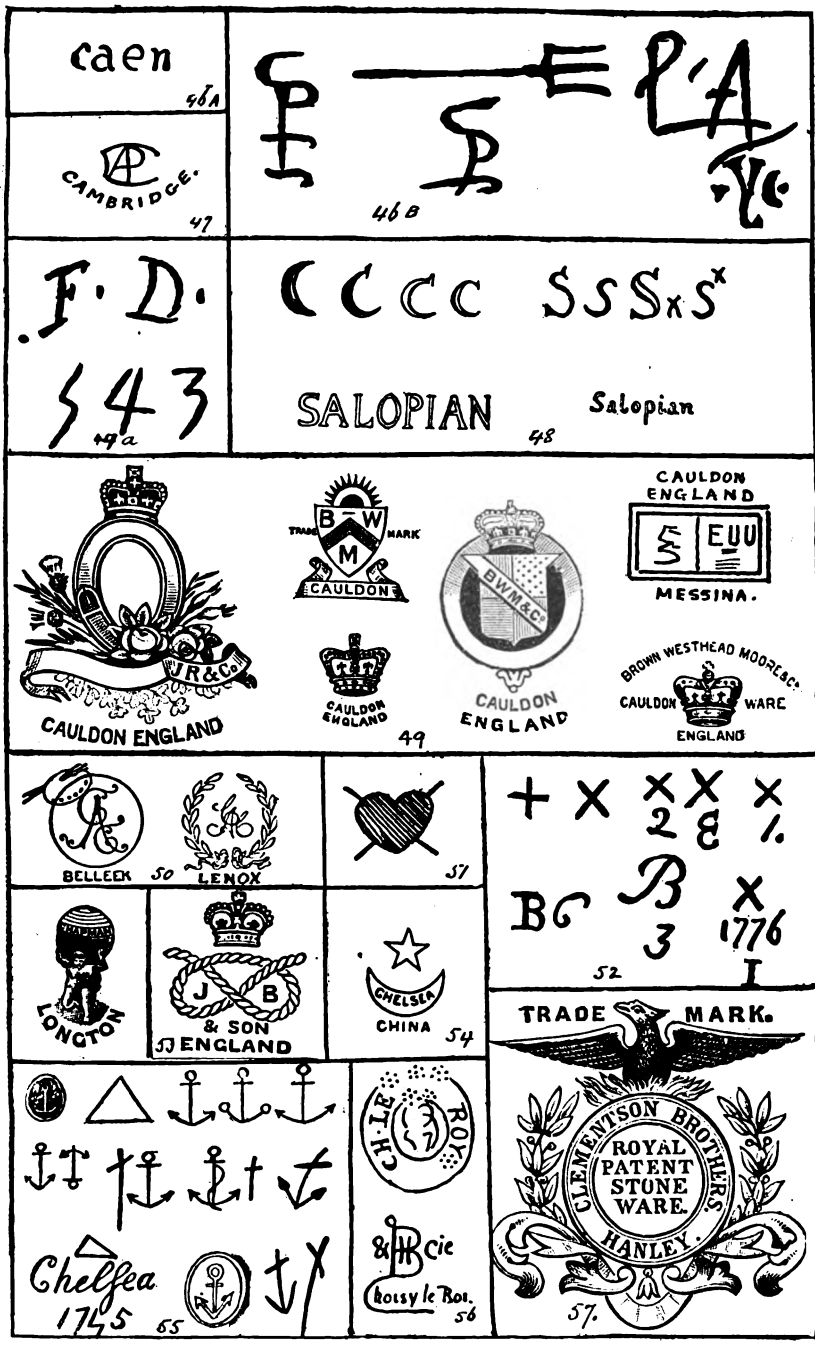
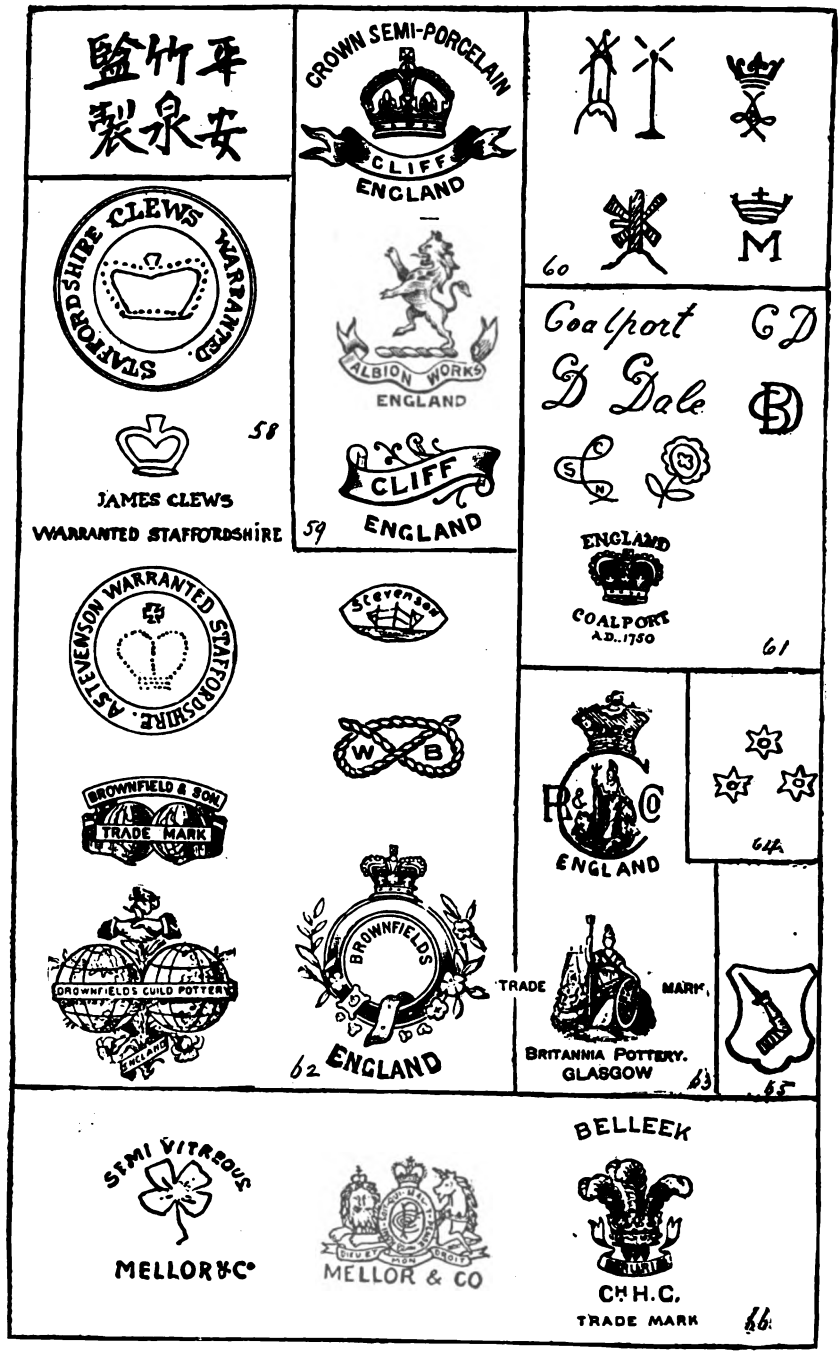
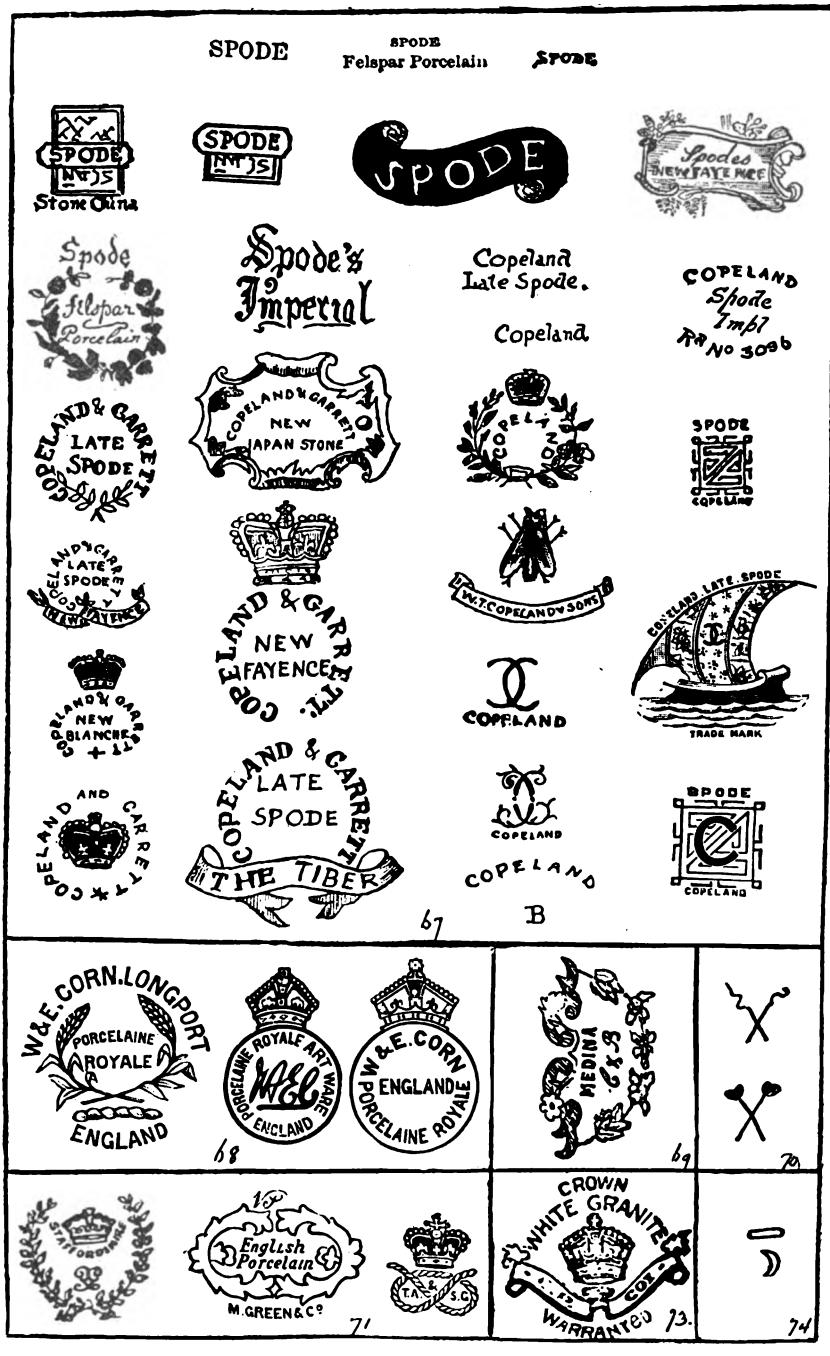
Annaberg.
13
14
AYNSLEY
ENGLAND
AYNSLEY
ENGLAND
17
19.
15.
16
STONE WARE
BARKER & SON
20
FRANCE
LIMOGES
21
18

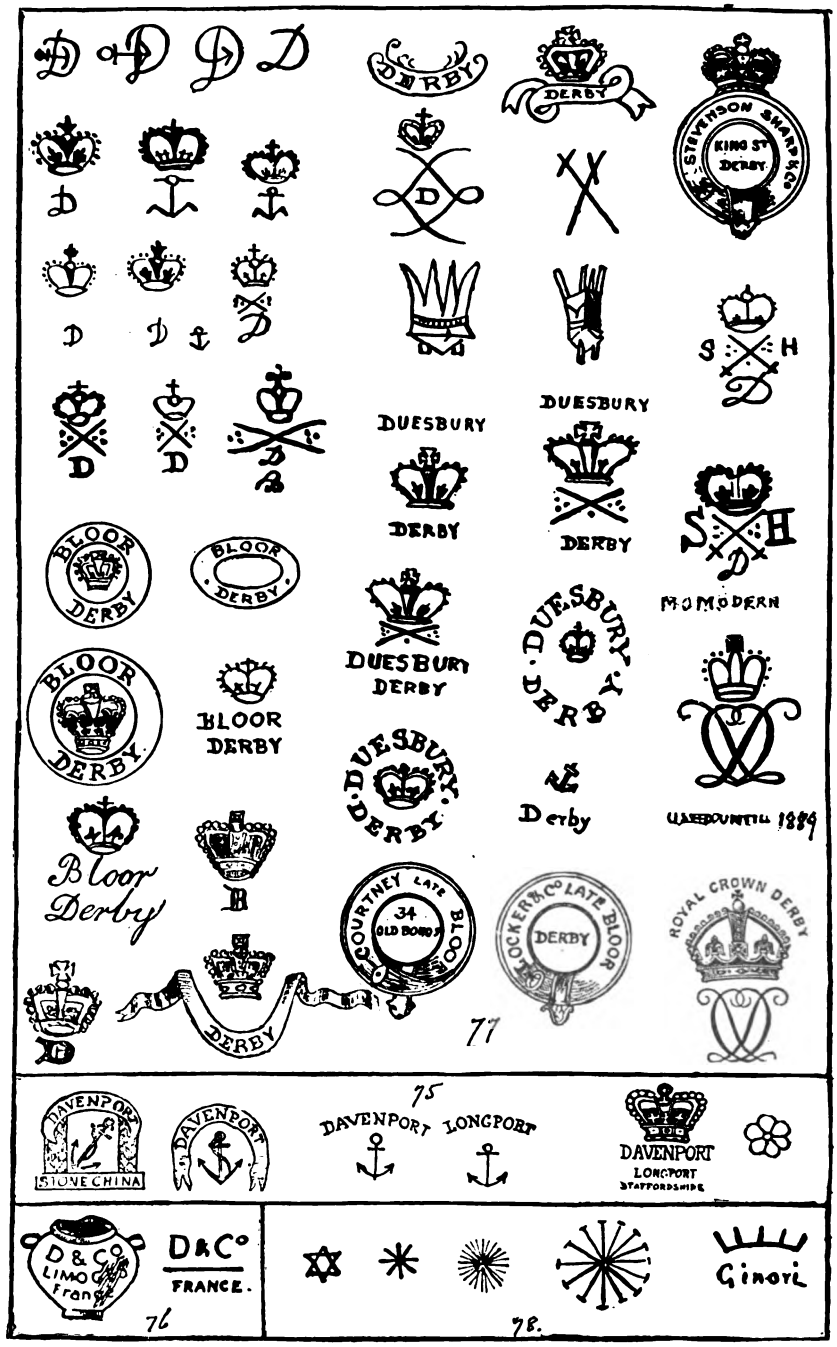

22
23
Triumphal Car
23
WARWICK VASE
TRADE MARK.
BELLEEK
24
Gebr. Benedikt.
BELLEVUE POTTERY
HULL
25
GEBRUDER BENEDIKT
MAYER HÖFEN
26
IVORY
E. B.
WARRANTED
E. BENNETT
STONE CHINA
27
BONA FAMA
MELIOR ZONA AUREA
W
WE
K.P.M.
28
BEST
P & B
TRADE MARK
TRADE MARK.
SEMI
IRONSTONE
CHINA
BISHOP & STONIER
ENGLAND
29
E. BINGHAM
28a
LA LOUVIERE
30
B.
B. & SON
TRADE MARK
NEW
BRIDGE
POTTERY
32


GENUINE IRONSTONE CHINA
E.F. BODLEY & Co
BURSLEM
31
MANLEY
EBD
ENGLAND
33
30
ROYAL PATENT
IRONSTONE
T&R BOOTE
T&R.BOOTE
ROYAL SEMI-PORCELAIN
WATERLOO POTTERIES
ENGLAND
34
WATERLOO POTTERIES
TRADE MARK
ROYAL PREMIUM
SEMI-PORCELAIN
T.&R.BOOTE.
ENGLAND.
TRADE MARK
BOOTHS
ROYAL SEMI PORCELAIN
STAFFORDSHIRE
ENGLAND
TG&FB
35
BORDEAUX
36
TRADE MARK.
B. M. & T. 37
EB JEL
B
38
E. BOURNE & J.E. LEIGH
EBJEL
ROYAL SEMI PORCELAIN
38
TRADE
SHAW
MARK.
38a
S.B.&.S
OLD MARK.
40
PORCELAINE OPAQUE
TRADE MARK
BRIDGWOOD & SON
ENGLAND
SB & SON
40
B
H
S
G.
43
B
SM
1703.
M.S
1722.
MI
1705.
17 P 40
R.S
E
M+B
J760
S
J&F
1750
41
BPM
42
B.B.
VIGILANT
BURFORD BROS.
P. CO.
44
HILL POTTERY
B & L
BURGESS & LEIGH
MIDDLEPORT
ROYAL SEMI-PORCELAIN
ENGLAND
45
BURGESS & LEIGH
MIDDLEPORT POTTERY
BURSLEM
B & M Co
royal china
46


caen
46A
CAMBRIDGE.
47
46B
F·D·
543
49a
SALOPIAN
Salopian
48
CAULDON ENGLAND
TRADE MARK
CAULDON
CAULDON ENGLAND
BWM&Co
CAULDON ENGLAND
49
CAULDON ENGLAND
EUU
MESSINA.
BROWN WESTHEAD MOORE&Co
CAULDON WARE
ENGLAND
BELLEEK
50
LENOX
51
52
LONGTON
J B
& SON
ENGLAND
CHELSEA
CHINA
54
TRADE MARK.
CLEMENTSON BROTHERS.
ROYAL PATENT STONE WARE.
HANLEY.
57.
Chelsea
1745
55
CH·LE ROY
& Cie
Choisy le Roi.
56


CROWN SEMI-PORCELAIN
CLIFF
ENGLAND
STAFFORDSHIRE CLEWS WARRANTED
58
JAMES CLEWS
WARRANTED STAFFORDSHIRE
ALBION WORKS
ENGLAND
CLIFF
59 ENGLAND
60
Coalport
C D
D Dale
ENGLAND
COALPORT
A.D. 1750
61
A STEVENSON WARRANTED STAFFORDSHIRE
Stevenson
W B
BROWNFIELD & SON
TRADE MARK
BROWNFIELDS
62 ENGLAND
R & C
ENGLAND
64
TRADE MARK
BRITANNIA POTTERY.
GLASGOW
63
65
SEMI VITREOUS
MELLOR & C°
MELLOR & CO
BELLEEK
CH H.C.
TRADE MARK
66


SPODE
SPODE
Felspar Porcelain
SPODE
SPODE
Stone China
SPODE
SPODE
Spodes NEW FAYENCE
Spode
Felspar
Porcelain
Spode's
Imperial
Copeland
Late Spode.
Copeland
COPELAND
Spode
Imp^l
Rd No 3096
COPELAND & GARRETT
LATE
SPODE
COPELAND & GARRETT
NEW
JAPAN STONE
COPELAND
SPODE
COPELAND
COPELAND & GARRETT
LATE
SPODE
NEW
BLANCHE
W.T. COPELAND & SONS
COPELAND & GARRETT
NEW
FAYENCE
COPELAND LATE SPODE
TRADE MARK
COPELAND & GARRETT
NEW
BLANCHE
COPELAND & GARRETT
LATE
SPODE
THE TIBER
COPELAND
SPODE
COPELAND
COPELAND
67
B
W&E.CORN.LONGPORT
PORCELAINE
ROYALE
ENGLAND
68
PORCELAINE ROYALE ART WARES
W&E
ENGLAND
W&E.CORN
ENGLAND
PORCELAINE ROYALE
MEDINA
69
70
STAFFORDSHIRE
English
Porcelain
M.GREEN&Co
71
T.A.&S.C.
CROWN
WHITE GRANITE
CO
WARRANTED
73.
74



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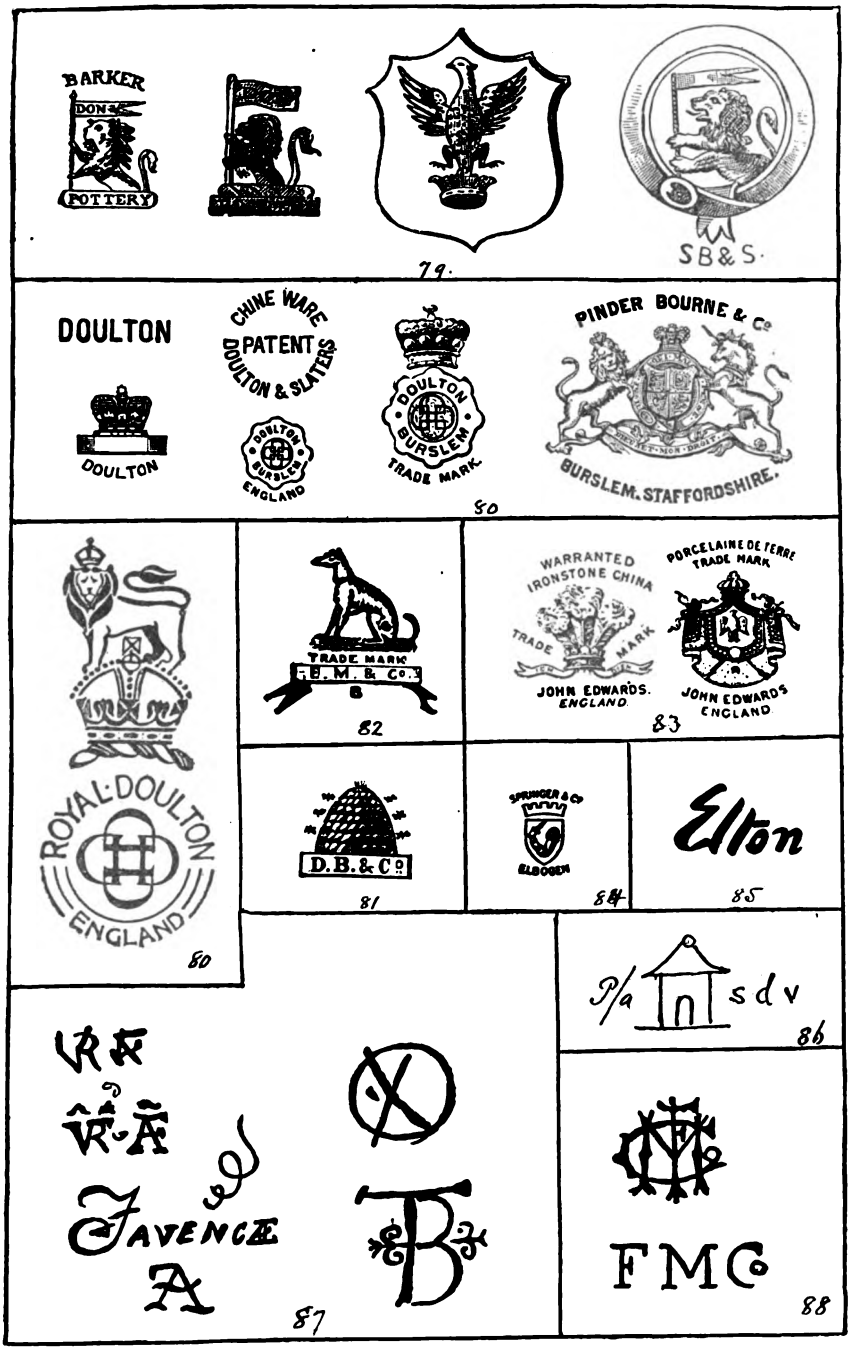
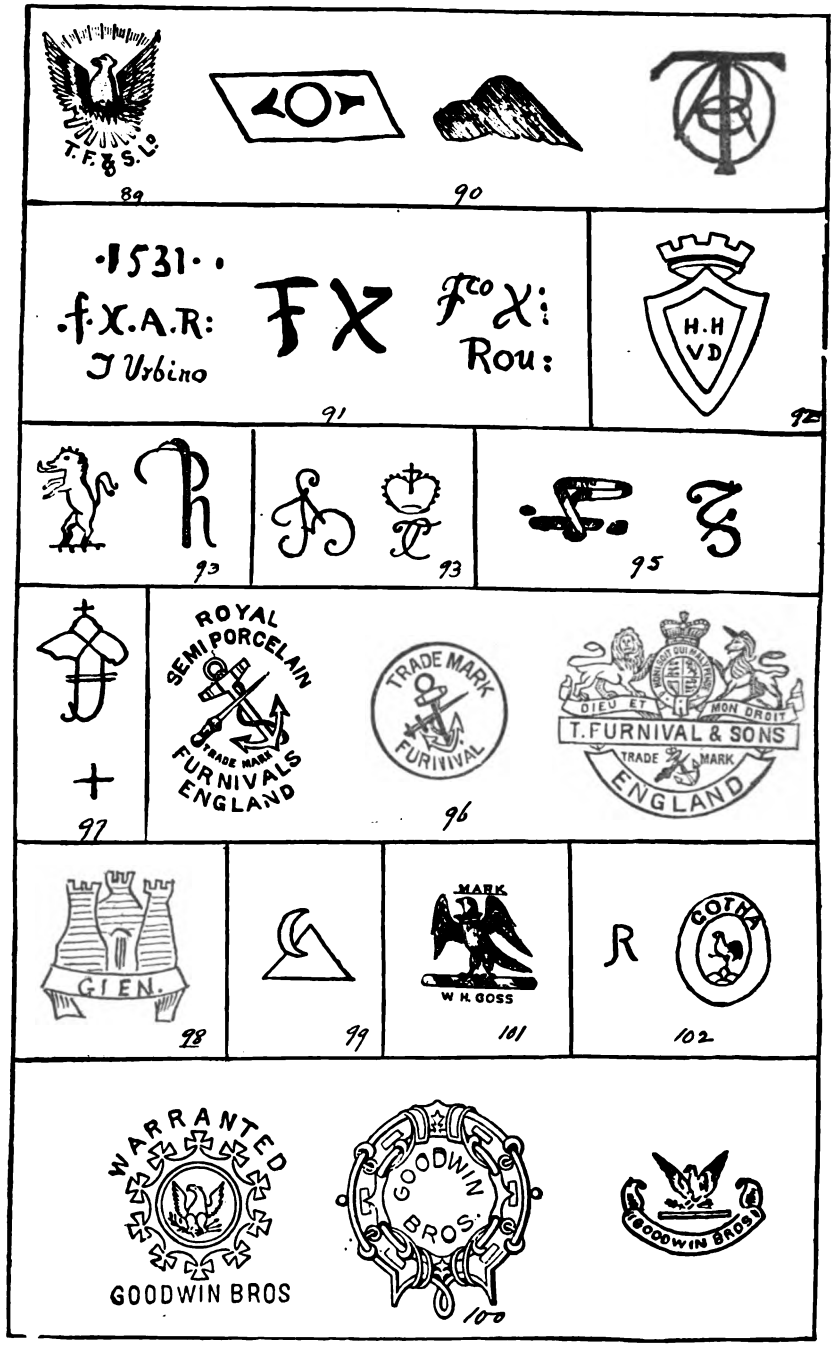

BARKER
DON
POTTERY
SB&S
79
DOULTON
DOULTON
CHINE WARE
PATENT
DOULTON & SLATERS
DOULTON
BURSLEM
ENGLAND
DOULTON
BURSLEM
TRADE MARK
PINDER BOURNE & Co
BURSLEM. STAFFORDSHIRE.
80
ROYAL DOULTON
ENGLAND
80
TRADE MARK
B. M. & Co.
B
82
WARRANTED
IRONSTONE CHINA
TRADE MARK
JOHN EDWARDS.
ENGLAND
PORCELAINE DE TERRE
TRADE MARK
JOHN EDWARDS
ENGLAND
83
D.B.& Co
81
SPRINGER & Co
ELBOGEN
84
Elton
85
P/a
sdv
86
FAVENCE
A
87
FMC
88



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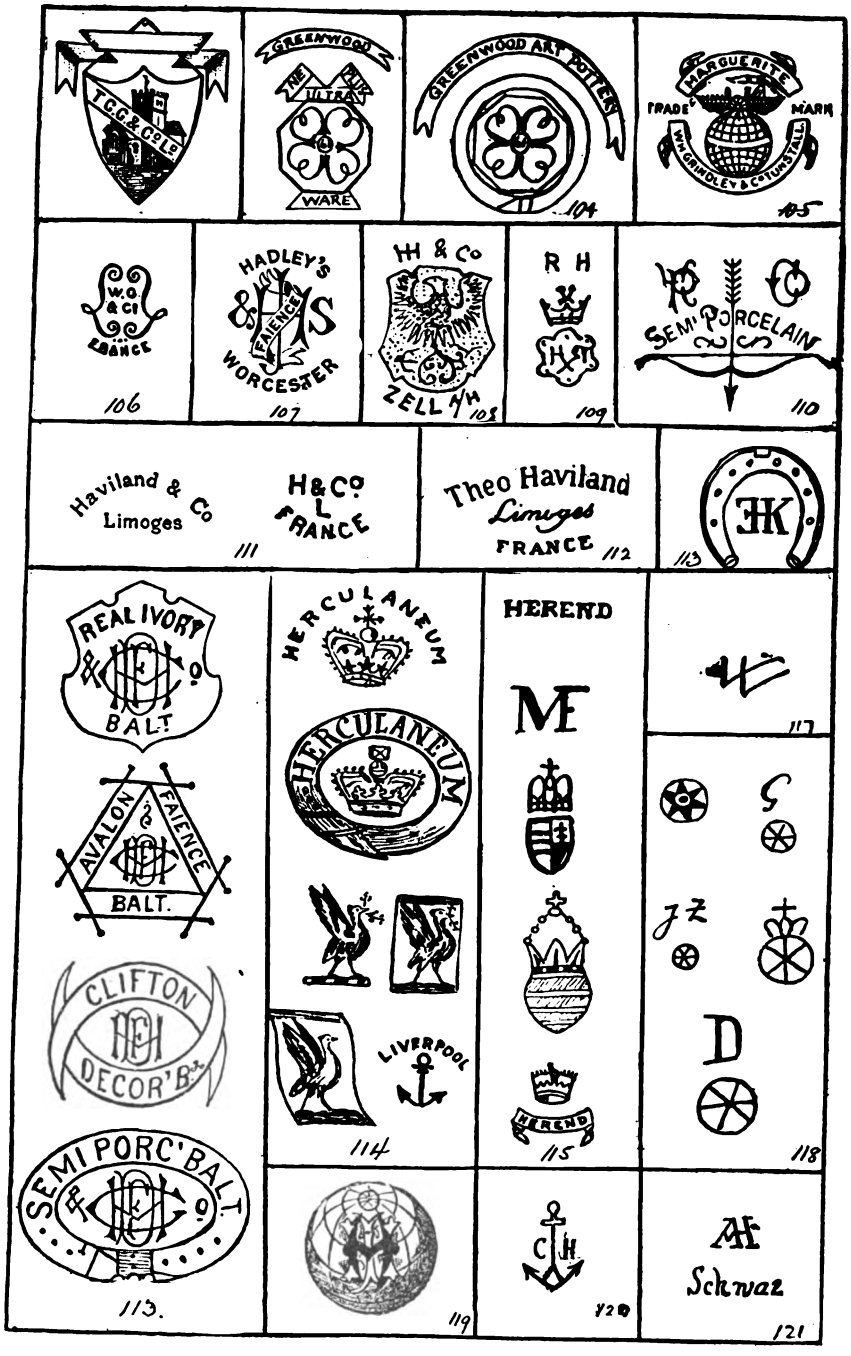
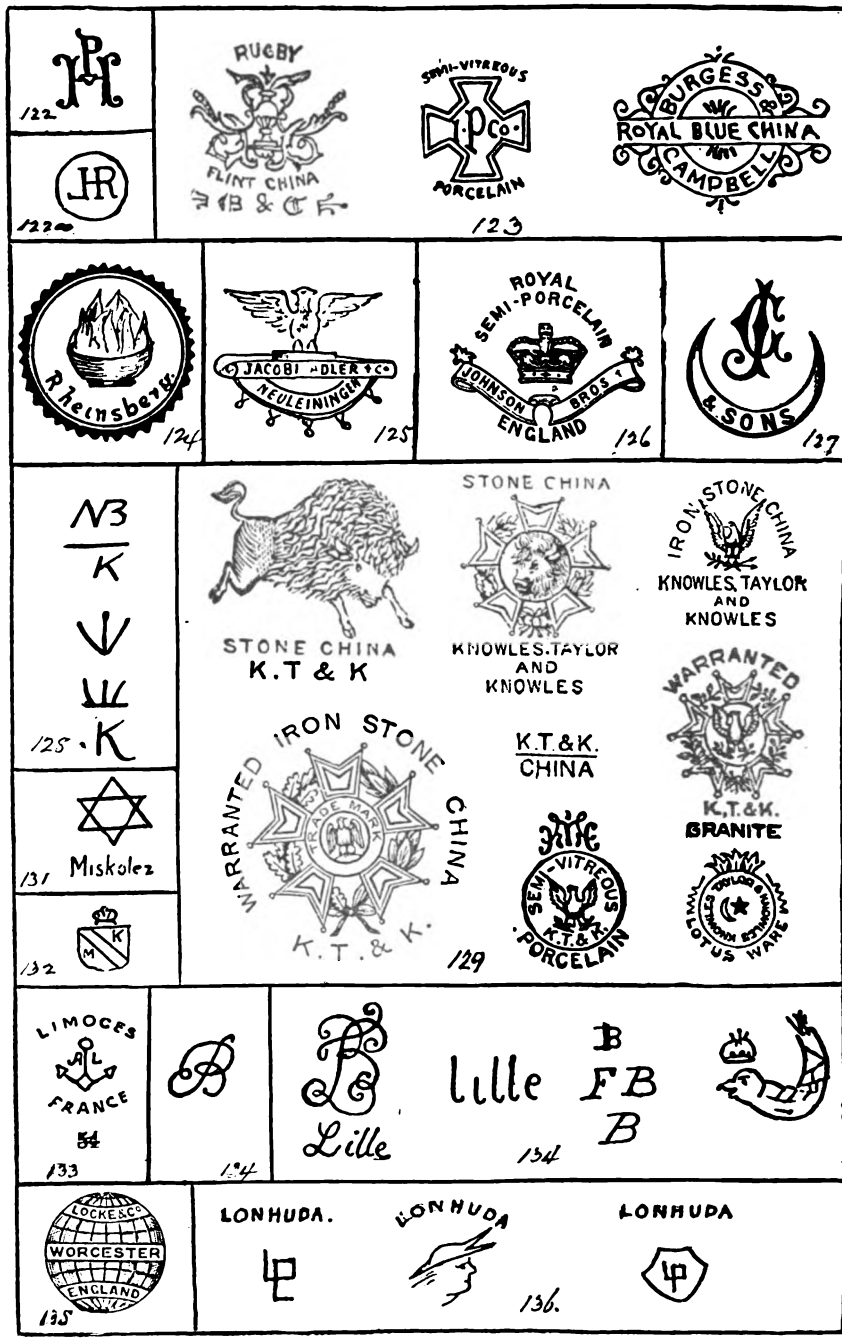

T.C.G.& Co Ld
GREENWOOD
NE PLUS ULTRA
WARE
GREENWOOD ART POTTERY
104
MARGUERITE
TRADE MARK
WM GRINDLEY & Co TUNSTALL
105
W.O. & Co
FRANCE
106
HADLEY'S
FAIENCE
WORCESTER
107
HH & Co
ZELL A/H
108
R H
109
SEMI PORCELAIN
110
Haviland & Co
Limoges
H&Co
L
FRANCE
111
Theo Haviland
Limoges
FRANCE
112
113
REAL IVORY
BALT
AVALON FAIENCE
BALT.
CLIFTON
DECOR'B
SEMI PORC'BALT.
113.
HERCULANEUM
HERCULANEUM
LIVERPOOL
114
HEREND
HEREND
115
117
118
119
C H
120
Schwaz
121



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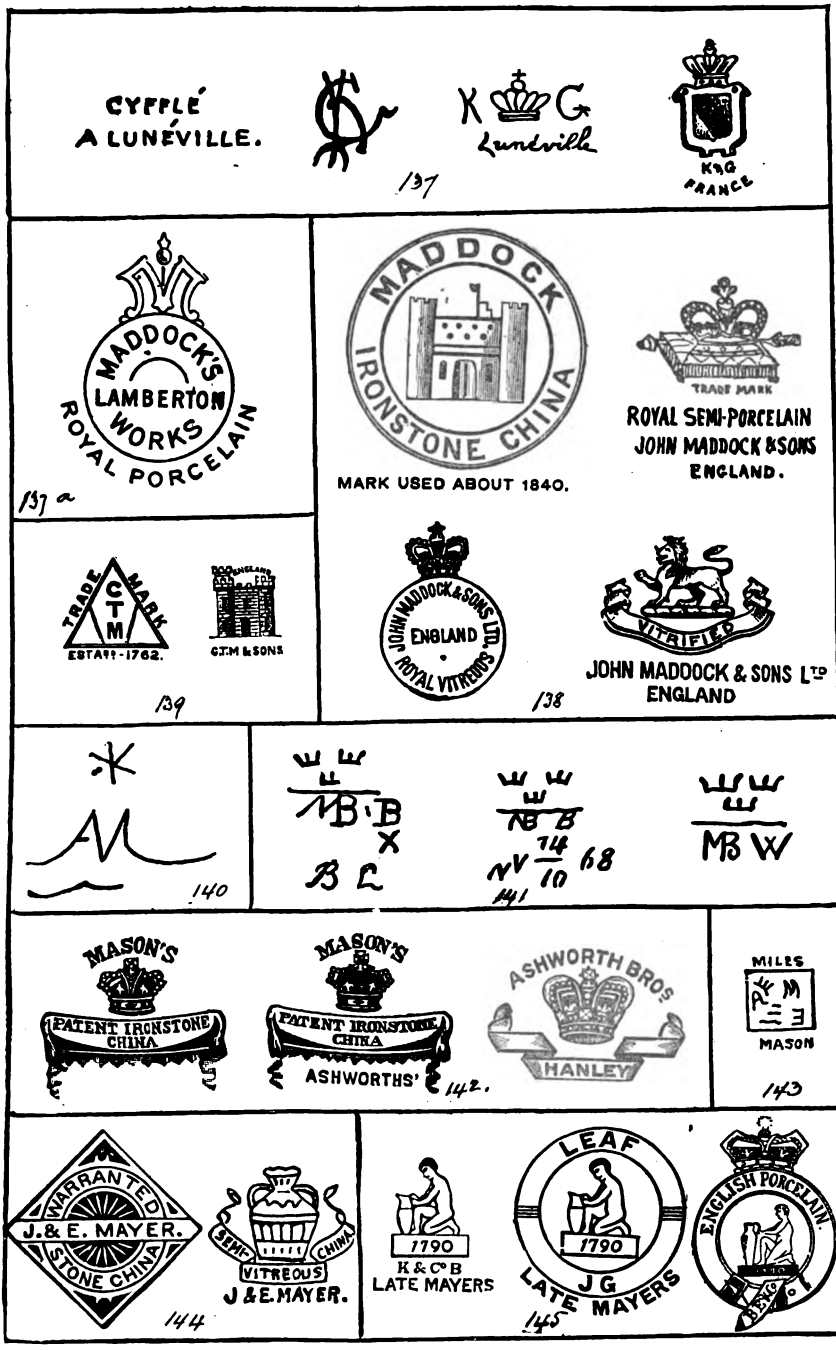
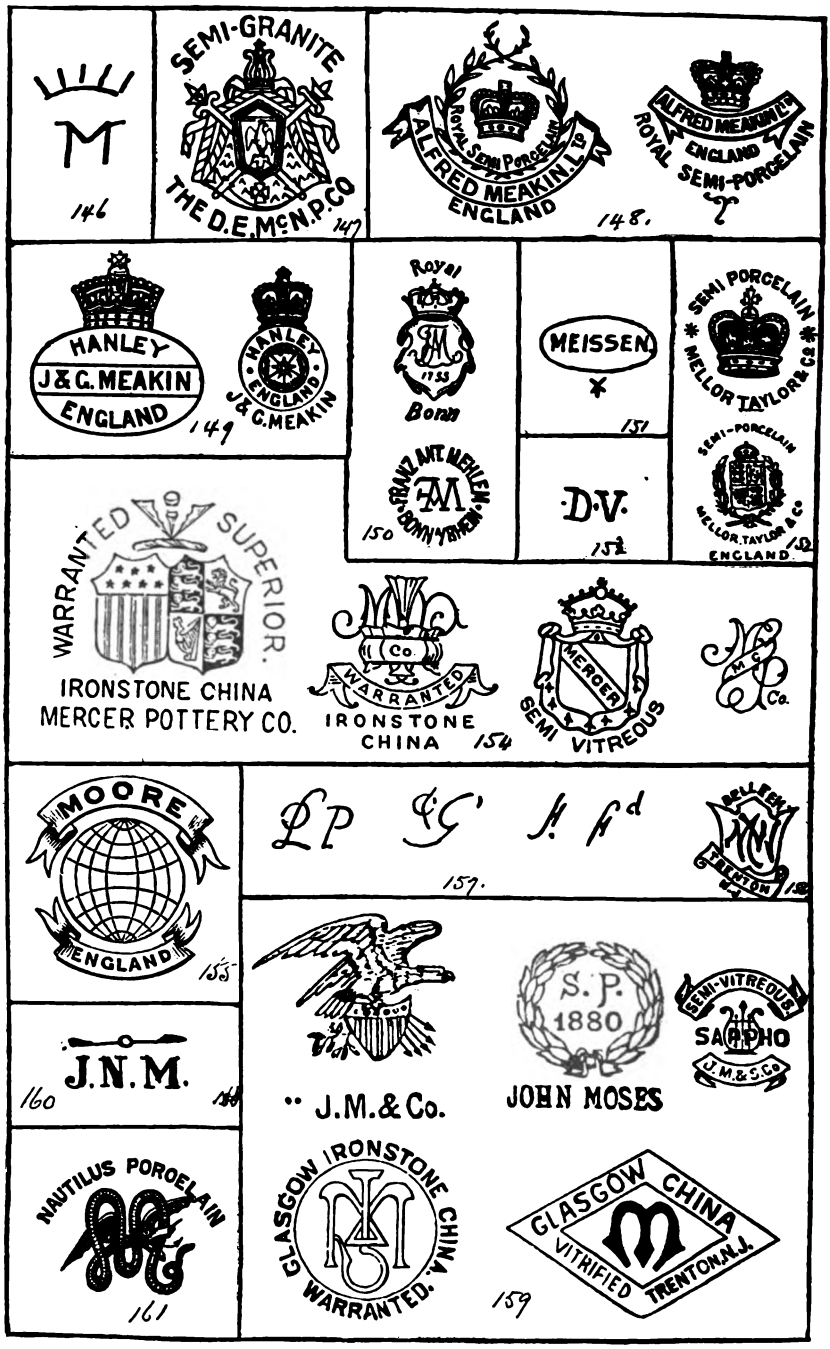

CYFFLÉ
A LUNÉVILLE.
K G
Lunéville
K&G
FRANCE
137
MADDOCK'S
LAMBERTON
WORKS
ROYAL PORCELAIN
137 a
MADDOCK
IRONSTONE CHINA
MARK USED ABOUT 1840.
TRADE MARK
ROYAL SEMI-PORCELAIN
JOHN MADDOCK & SONS
ENGLAND.
TRADE MARK
C T M
ESTAᴰ - 1762.
C.T.M & SONS
139
JOHN MADDOCK & SONS LTD.
ENGLAND
ROYAL VITREOUS
VITRIFIED
JOHN MADDOCK & SONS LTD
ENGLAND
138
140
141
MASON'S
PATENT IRONSTONE
CHINA
MASON'S
PATENT IRONSTONE
CHINA
ASHWORTHS'
142.
ASHWORTH BROS
HANLEY
MILES
MASON
143
WARRANTED
J.& E. MAYER.
STONE CHINA
SEMI
VITREOUS
CHINA
J & E. MAYER.
144
1790
K & Cº B
LATE MAYERS
LEAF
1790
J G
LATE MAYERS
145
ENGLISH PORCELAIN.



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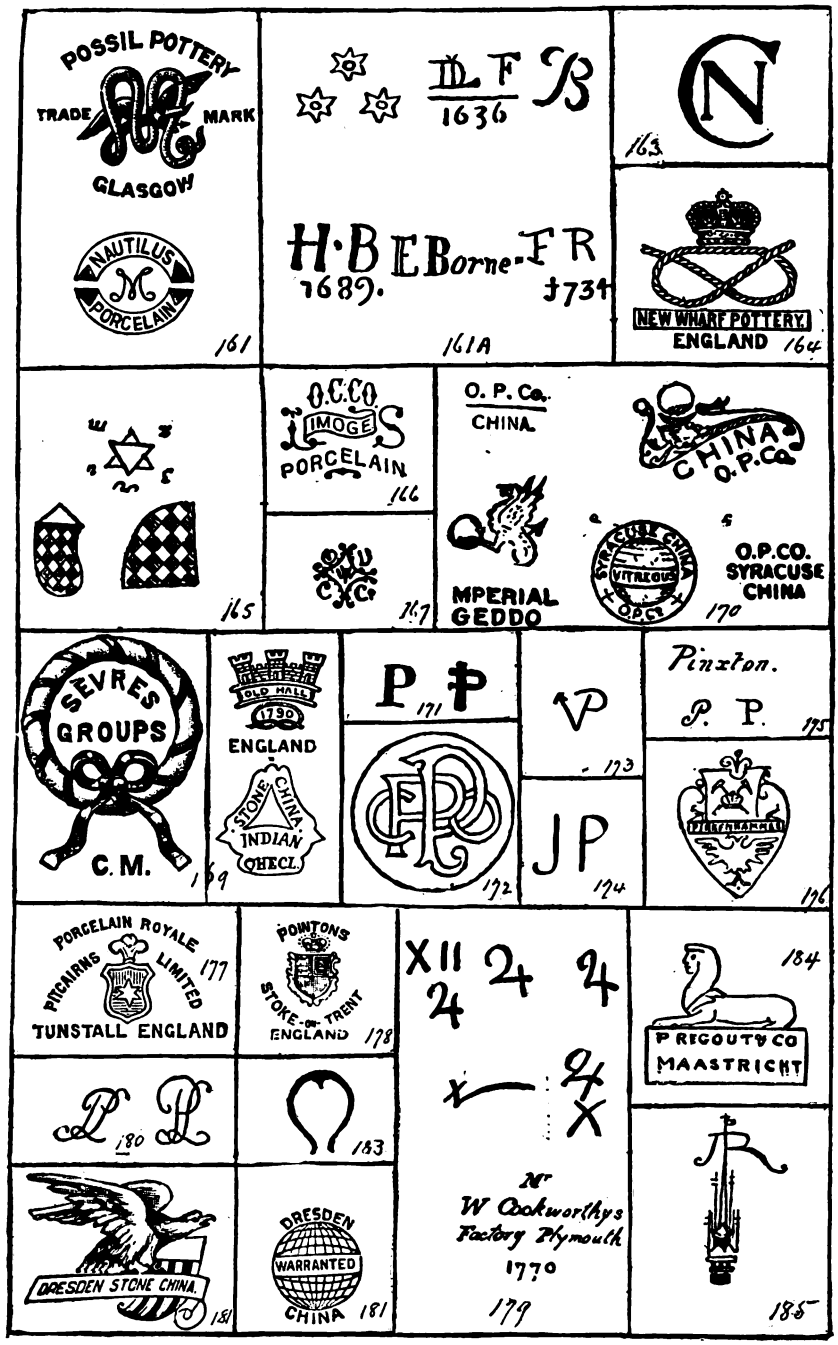
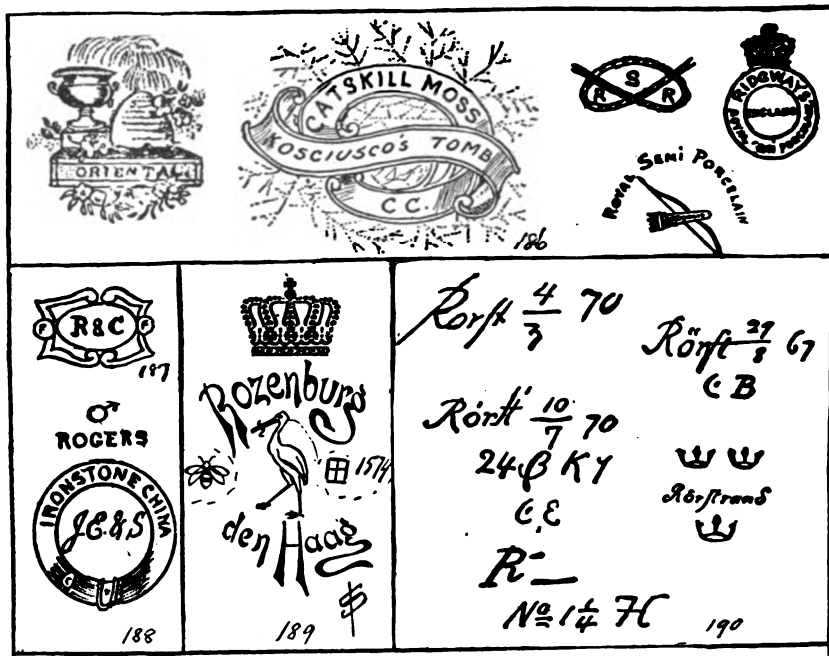

POSSIL POTTERY
TRADE MARK
GLASGOW
NAUTILUS
PORCELAIN
161
1636
H·B E Borne·F R
1689.
1734
161A
163
NEW WHARF POTTERY
ENGLAND 164
165
O.C.CO
IMOGE
PORCELAIN
166
167
O. P. Co.
CHINA
CHINA
O.P.Co
MPERIAL
GEDDO
SYRACUSE CHINA
VITREOUS
O.P.CO.
O.P.CO.
SYRACUSE
CHINA
170
SEVRES
GROUPS
C.M.
169
OLD HALL
1790
ENGLAND
STONE CHINA
INDIAN
QHECL
P 171
172
V 173
JP 174
Pinxton.
P. P. 175
176
PORCELAIN ROYALE
PICAIRNS
LIMITED
TUNSTALL ENGLAND
177
POINTONS
STOKE-on-TRENT
ENGLAND 178
180
183
DRESDEN STONE CHINA.
181
DRESDEN
WARRANTED
CHINA 181
XII 24 24
24
24
X
Mr
W Cookworthys
Factory Plymouth
1770
179
184
P REGOUTS CO
MAASTRICHT
185



A to J. are marks on patterns with radiating designs.
J " M, on decorations in blue, heightened with black; mostly in blue
N " Q, colored decorations with copper lustre; R to V. à la corne designs in bright colors; A. A, on similar designs, but with citron yellow predominating; B. B, the marks of A. Poterat, a celebrated Rouen faience manufacturer, who made the first pieces of artificial china in France.

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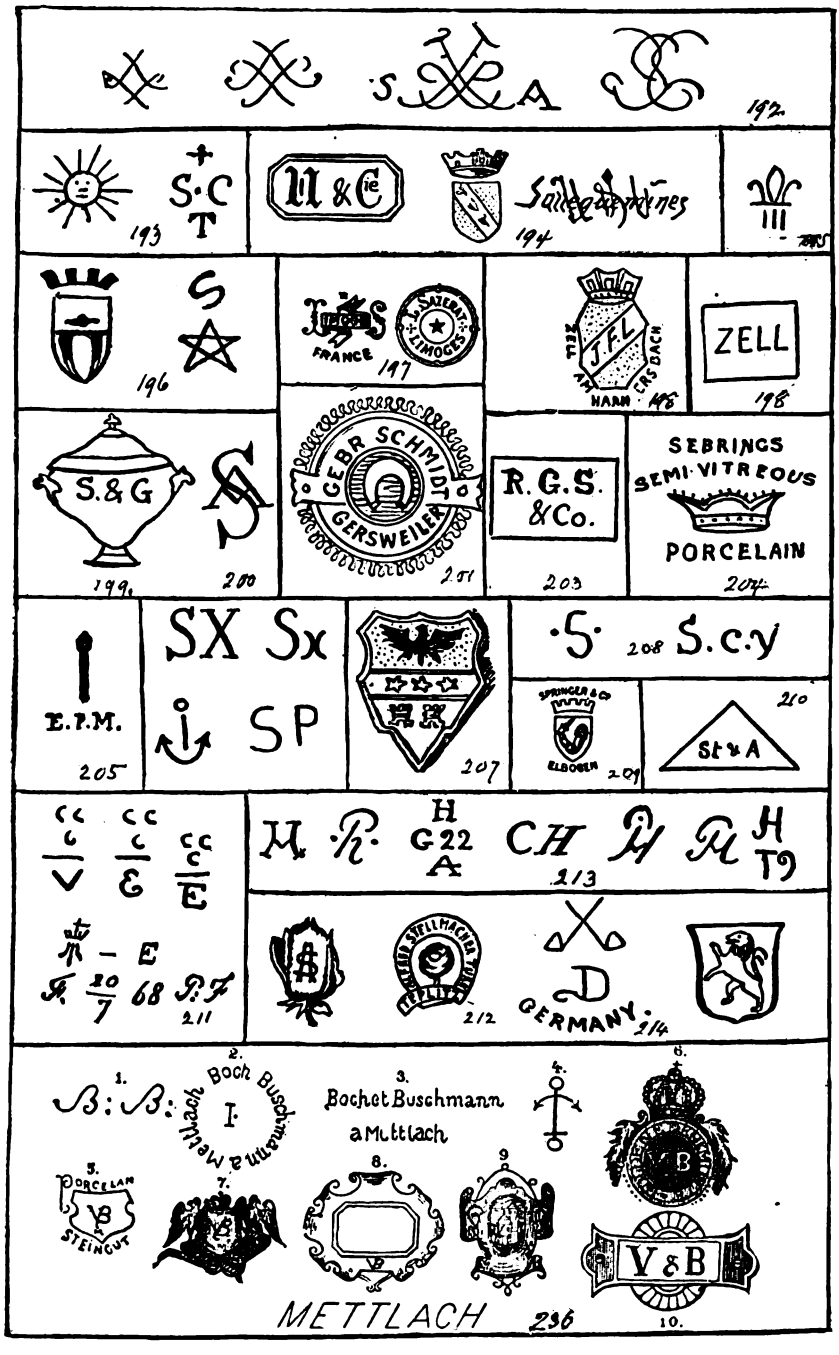
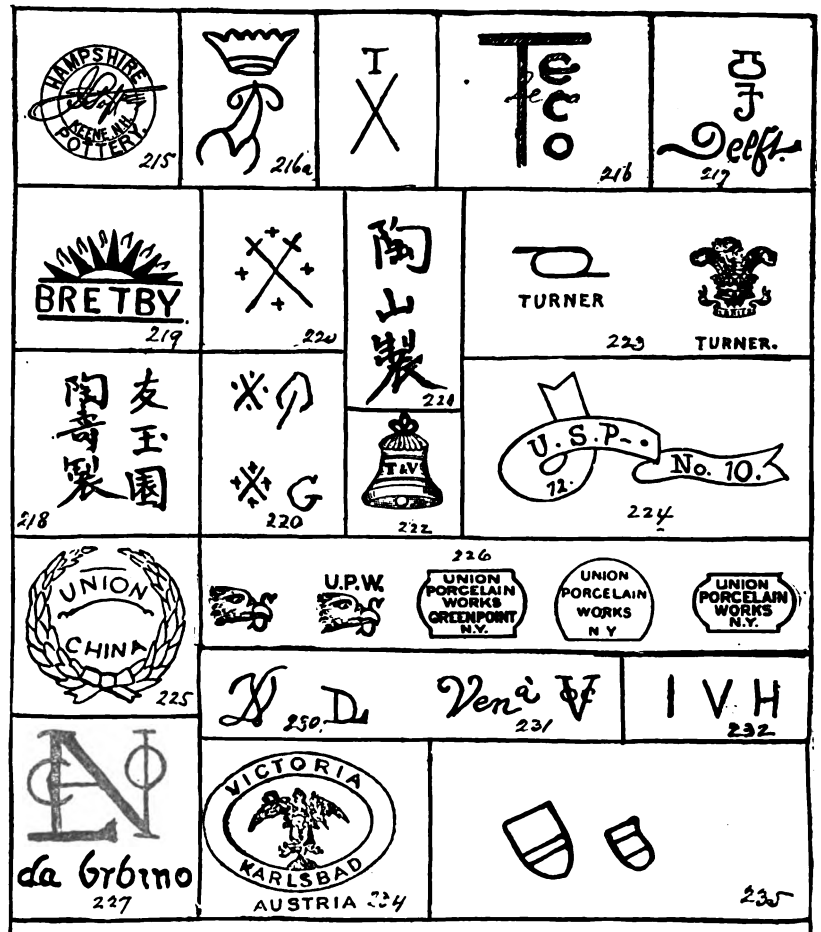

192
193
194
196
FRANCE
197
L. SAZERAT LIMOGES
J.F.L
ZELL AM HARN
198
ZELL
S.&G
199
200
GEBR SCHMIDT
GERSWEILER
201
R.G.S. &Co.
203
SEBRINGS
SEMI-VITREOUS
PORCELAIN
204
E.P.M.
205
SX Sx
SP
207
208 S.c.y
SPRINGER & Co
ELBOGEN
209
210
St & A
211
212
GERMANY
214
1.
2.
Boch Buschmann a Mettlach
3.
Bochet Buschmann
a Mettlach
4.
5.
PORCELAIN
STEINGUT
7.
8.
9
6.
V&B
10.
METTLACH
236



VILLEROY & BOCH, Septfontaines.—Nos. 1-10, before 1795; 11-14, between 1795-1830; 15, about 1830; 1, 2, 11, 12, 13 and 15 were imprinted; 3-10 were painted in blue; 14 was stamped in green.

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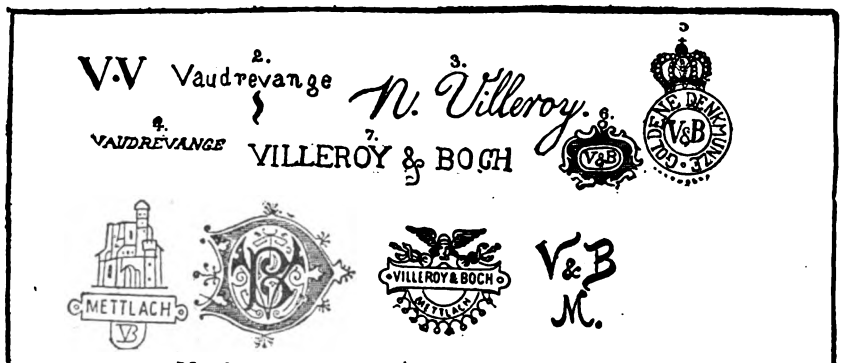
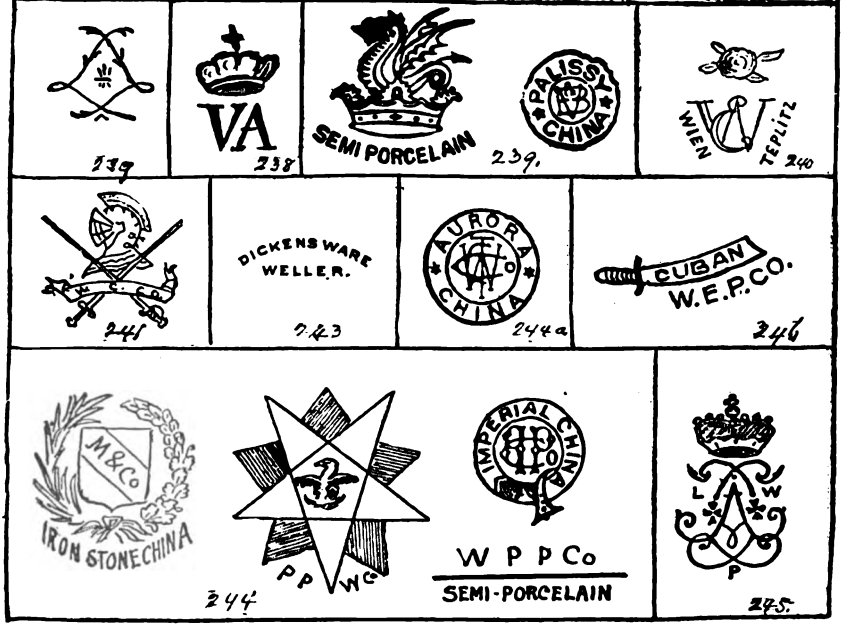


Mettlach.—1, about 1810, painted in blue; 2, 3 and 4, from 1810-1841, imprinted; 5, from 1841-1860, imprinted; 6, from 1844-1860, stamped in blue; 7, from 1842-1860, laid on (for stone substances); 8, from 1852-1872, laid on (for Parian); 9, from 1865-1875, stamped (for colored impression); 10, 1876-1883, laid on (for chromolith); 11, from 1860-1874, stamped in blue. Wallerfangen.—1, from 1790-1825, imprinted; 2, from 1825-1841, imprinted; 3, from 1825-1841, painted in blue; 4, from 1825-1841, imprinted; 5, from 1844-1860, stamped in brown; 6, from 1852-1865, stamped (for porcelain); 7, from 1860-1874, stamped in black. The last four are the present marks.

Since 1874 the factory mark with the head of Mercury has been introduced in all the earthenware factories of the firm.



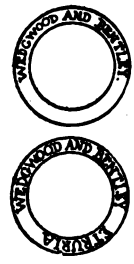
Old Marks

WEDGWOOD

Wedgwood & Bentley

Wedgwood

MODERN



JOSIAH WEDGWOOD & SONS, Etruria.—On old specimens the main mark is the name impressed in the clay, varying from 1-4 to 1-32 of an inch in height. Sometimes the initial letter only was a capital. During Wedgwood's partnership with Bentley the names were conjoined,

WEDGWOOD
& BENTLEY,

and also as shown in the second and last two marks. Bentley's partnership only extended to ornamental pieces. The mark

JOSIAH WEDGWOOD,

with a date underneath, belongs to the time when the works were carried on by the son of the founder. In the older stamps the O was always wide; in the later ones it is always narrow.

For Tiles.

MODERN.

For Earthenware and Jasper

WEDGWOOD.

For China

WEDGWOOD

The marks on the following pages are either without reference number in the text, or the makers represented have not previously been mentioned. In the former case a reference is made to the text.

M212 Stellmacher, A., Turn., near Teplitz.
244a Wick China Co., Kittanning, Pa.
253 Arras. Page 35.
254 Art Pottery Co., Hanley.
255 Aynsley, H., & Co., Longton. China.
256 Baguley, Isaac. See page 35.
257 Baker & Co., Ltd., Fenton. Earthenware.
258 Barkers & Kent, Ltd., Longton.
259 Bauer, Adolph. Page 38.
260 Baum, J. H., Wellsville, Ohio. Page 38.
261 Bauscher, Aug., Weiden. Established 1881.
262 Beerbower, L., & Co., Elizabeth, N. J. Page 40.
263 Bellmark Pottery Co., Trenton, N. J. Sanitary.
264 Berg, Justus. Page 46.
265 Bertram, B., Luftelburg. Majolica, etc. Page 47.
266 Birks, L. A., & Co., Stoke-upon-Trent.
267 Bohne, E. Page 57.
268 Bordeaux. Page 59.
269 Bordello Bros. Page 69.
270 Bourg-la-Reine. Page 62.
270a Breber & Leibman. Page 67.
271 Brameld. See Swinton.
272 Brancas-Laureguais. Page 66.
273 Britannia China Co., Longton.
274 Brouwer, T. A., Jr. Page 72.
275 Buhl, H., & Son, Grossbreitenbach. Est.. 1780.
276 Burslem Pottery Co., Burslem.
277 Rissai, Inouye, Smeda, Tokio.
278 Christie & Beardmore, Fenton. Earthenware.
279 Collingwood Bros., Longton. China.
280 Collier, S. & E., Reading. Terra cotta.
281 Copenhagen Royal. See Denmark.
282 Copenhagen, middle of 18th century.
283 Ditmar, Rudolph, Znaim. Est. 1888. Majolica.
284 Dornheim, Koch & Fischer. Est. 1860 They have made china since 1880.
285 Dresden Porcelain Co., Longton. The two last are old marks.

286 Emery, F. J., Cobridge. Not now in business.
287 Etiolles.
288 Faïence d'Orion. The cypher of Henri deux.
289 Fell & Co., Newcastle-on-Tyne.
290 Fischer, Naumann & Co., Semenau. Figures. Est. 1860.
291 Frankenburg'sche, Tillowitz. Est. 1852.
292 Gardners, Moscow. Page 241.
293 Giorgio Maestro. Page 21.
294 Glasser & Greiner, Schmiedefeld. Est. 1809.
295 Glatz, J., Vellengen. Est. 1870.
296 Globe Pottery Co., East Liverpool, Ohio.
297 Goodwin, Stoddard & Co., Longton. China.
298 Grainger, Geo. See Worcester.
299 Ford & Son, Burslem.
300 Ford, S., & Co., Burslem.
301 Green, T. G., & Co., Burton.
302 Grueby Faience Co., Boston. See Grueby.
303 Hammersley & Co., Longton. China.
304 Hancock, B., & Son., Stoke-upon-Trent. Earthenware.
305 Hancock, F., & Co., Stoke-upon-Trent. Earthenware.
306 Harrup & Burgess, Hanley. Earthenware.
307 Hawley Bros., Ltd., Rotherham. Earthenware.
308 Hawley, Webberley & Co., Longton. Earthenware.
309 Hines Bros., Fenton. Earthenware.
310 Hollinshead & Greatbach, Burslem. Earthenware.
311 Hollinshead & Kirkham, Tunstall. Earthenware.
312 Holmes & Son, Longton.
313 Kessell, J. P., van, Delft. Est. 1656.
314 Keyser & Pynaker, Delft. Est. 1680.
315 Kleynoven, Q., Delft. Est. 1680.
316 Kornleff Bros., St. Petersburg.
317 Kulick, Jan Jansz, Delft. Est. 1662.
318 Laughlin, Homer, China Co. Page 345.
319 Laporte, R., Limoges.
320 Leeds Pottery. Page 346.
321 Liége.
322 Limoges. Mark of Sieur Massier. Page 350.
323 Lowesby. Leicestershire Terra-Cotta Co. 1835-40.
324 Littler, W. Longton.
325 Martin Bros., Limoges.
326 Mac Intyre, J., & Co.
327 Mintons. Page 388.
328 McNeal & Co., Longton.

329 Mayer, T., Stoke-upon-Trent. Page 379.
330 Merrimac Pottery. Page 385.
331 Monte Loupo. Page 395.
332 Minas, Hadji, Turkey. A modern factory. Good reproductions of old Persian.
333 Moravian.
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335 Morris, T., Stoke-upon-Trent.
336 Myott Sons & Co., Stoke-upon-Trent.
337 Neale, J. Page 408.
338 New Hall works. Page 414.
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340 Nymphenburg. Mark of Kroniglich Bayerische Porz. manufactory, the modern works.
341 Ohme, Herman, Sorgau. Est. 1883.
342 Ott & Brewer, Trenton. Page 424.
343 Palmer, H. Page 433.
344 Pinder, Bourne & Co. See Doulton.
345 Paree, Pieter, Delft. Sign of the "Metal Pot." Est. 1759.
346 Pearson & Co., Chesterfield.
347 Plant, R., & Sons, Longton.
348 Plant, R. H., & S. L., Longton.
349 Plant Bros. Longton.
350 Podmore, Walker, & Co. Page 452.
351 Pauer, D., Delft. Sign of the "Peacock." Established in 1651 and the works continued until the end of the eighteenth century.
352 Price Bros., Burslem. Decorated jet ware.
353 Radford, S., Fenton. China.
354 Radford & Drakeford, Longton.
355 Reissberger & Co., Franz. Est. 1882.
356 Reinische, Porz, near Dusseldorf. Est. 1861.
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362 Seville.
363 Salt Bros., late Brownhills Pottery Co.
364 Saltzer, Aug., Eisconach. Est. 1858. Majolica, etc.
365 Smith, W. T. H., & Co., Longport. Earthenware.
366 Steubenville Pottery Co.
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368 Taylor & Kent, Longton.
369 Taylor, Tunnicliffe & Co., Hanley.
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377 Wittenberg, Steingut fabric.
378 Watcombe Terra-Cotta Co., Devon.
379 Wedgwood & Co., Tunstall.
380 Winkle, F., & Co., Hanley. The second mark is that of their predecessors, Winkle & Wood.
381 Wood, Enoch. Page 611.
282 Zslonay, W., Funfkirchen. Page 625.
383 Knowles, E. M., Co., East Liverpool, Ohio.
384 Taylor, Smith & Taylor Co., East Liverpool, Ohio.
385 Dedham. See Robertson.
386 Hispano Moresque. Seventeenth century.
387 Bennington. See United States Pottery.
388 Fischern, near Carlsbad. Bawo & Dotter.
389 Bavarian china.
390 Made for C. L. Dwenger, New York.
391 Kloesterle Porzelan fabrik.
392 Elite china. Bawo & Dotter.
393 Makuzo, Kozan.
394 Seiji Keisha. Page 518.
395 Haito, Takemoto. Famous imitations of peach blow and Sang de boeuf. He died in 1892 and was succeeded by his son. The first mark is the father's; the second that of his son.
396 Taizan.
397 Yabou, Meizan, the foremost artist of Osaka on Satsuma pottery. The mark is in gold.
398 Kinzan. Another celebrated Satsuma decorator.
399 Kinkozan pottery. Awata, Kioto. Decorations in gold and colors.
400 Okumura pottery. Unique decorations on the glaze.
401 Seifu Yohei. Page 518.
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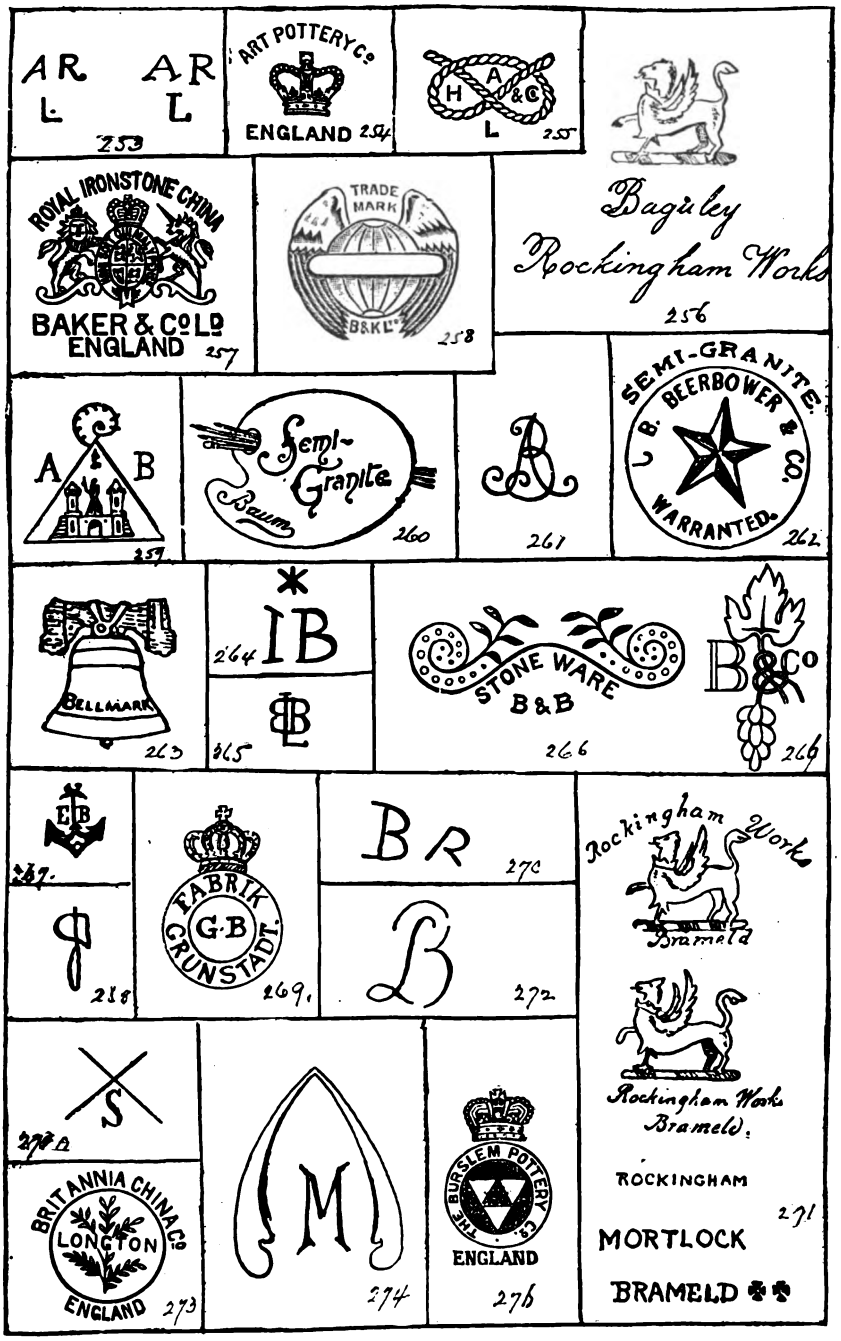
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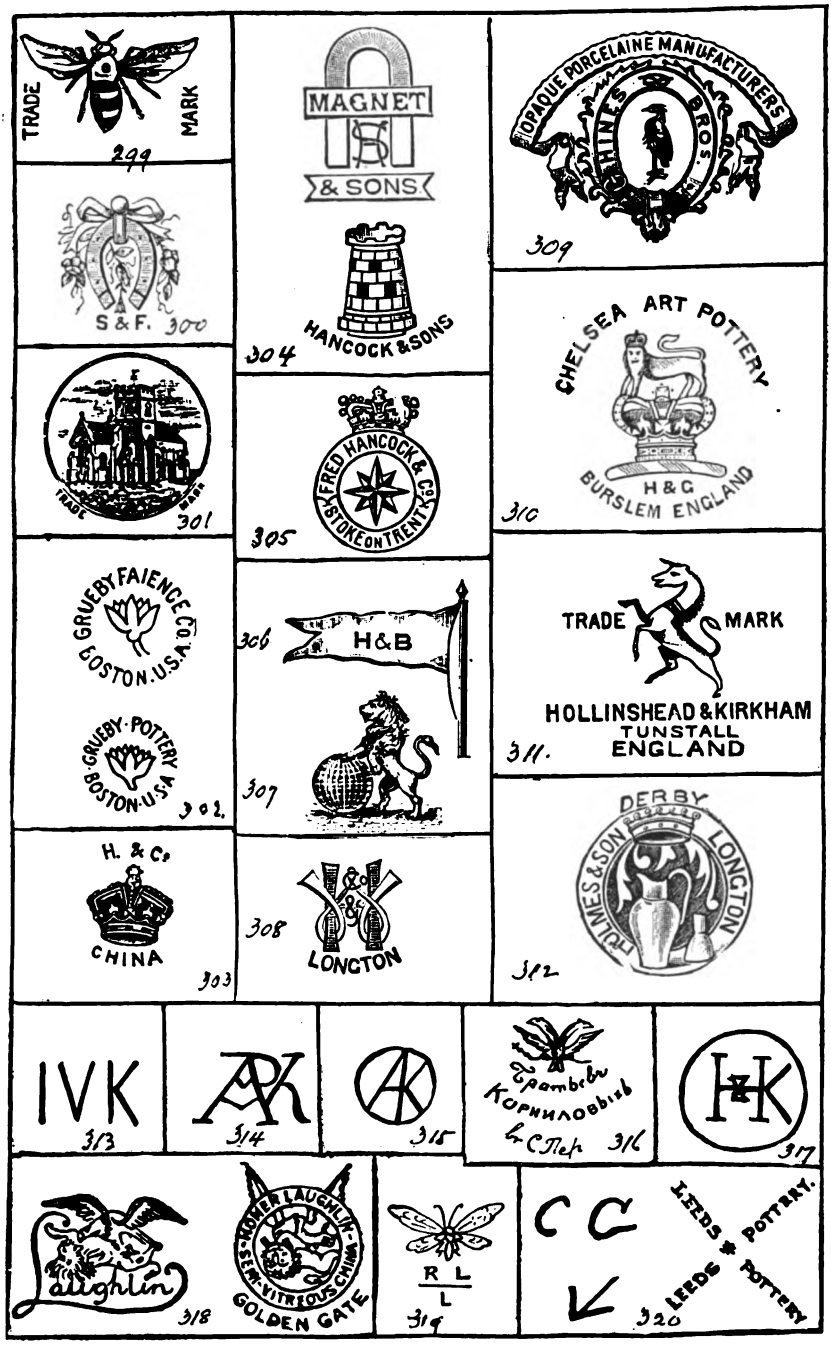
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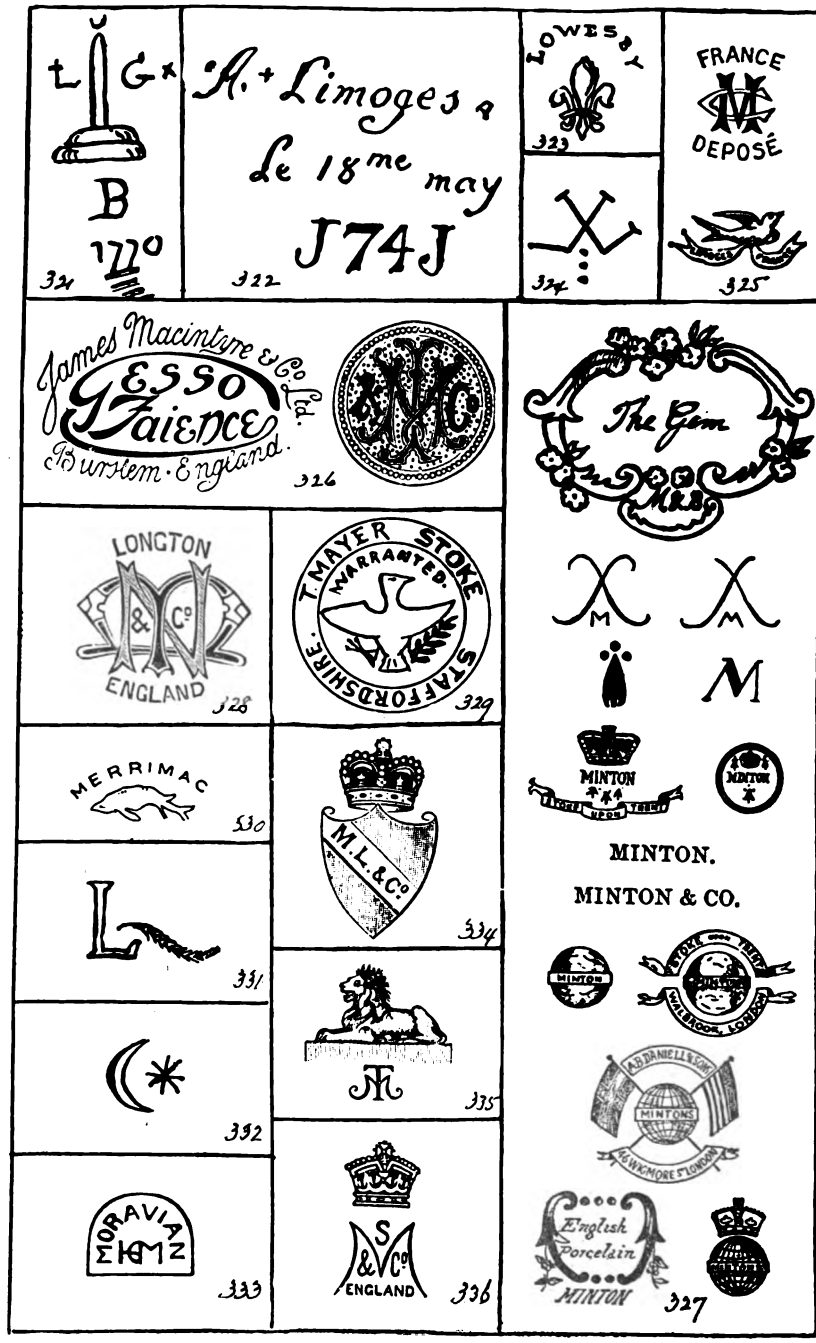
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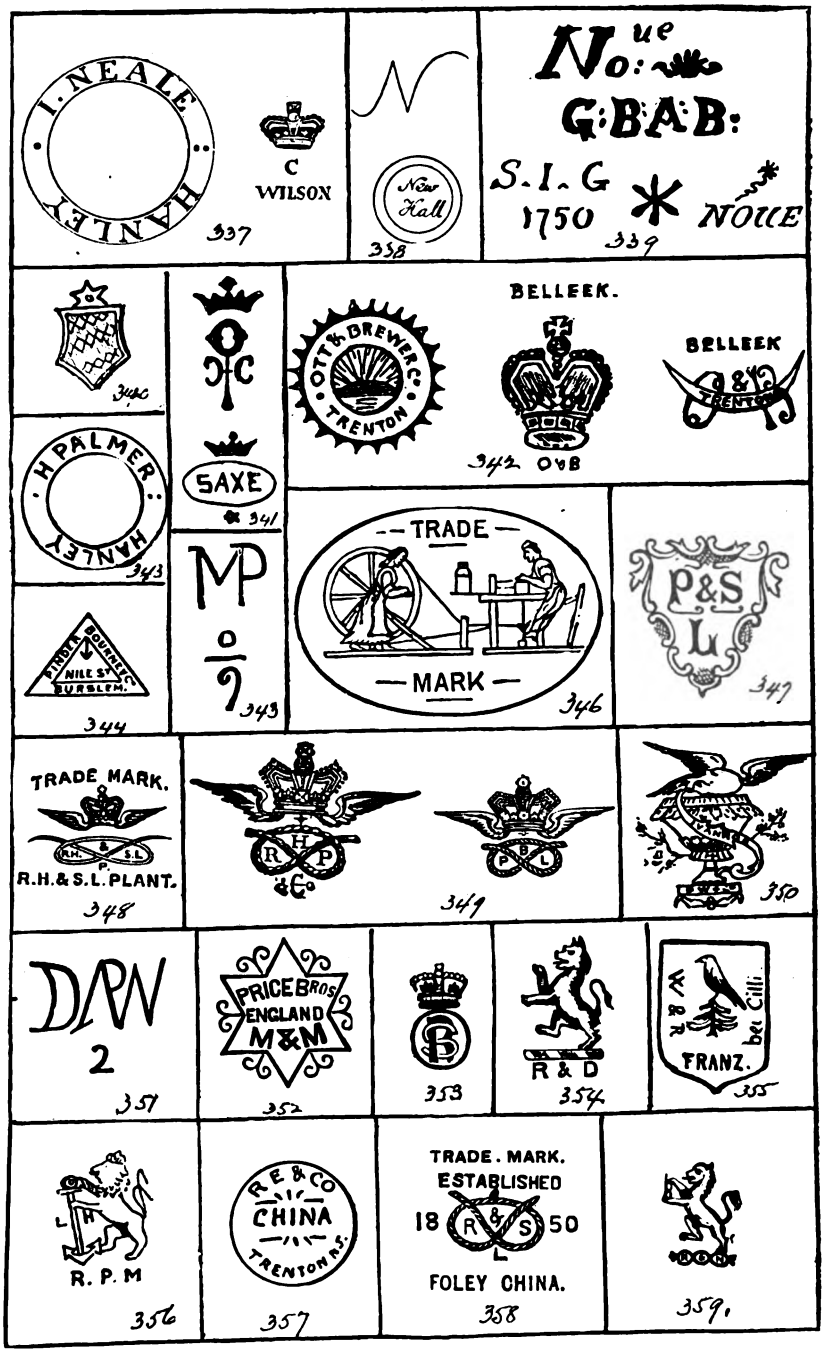
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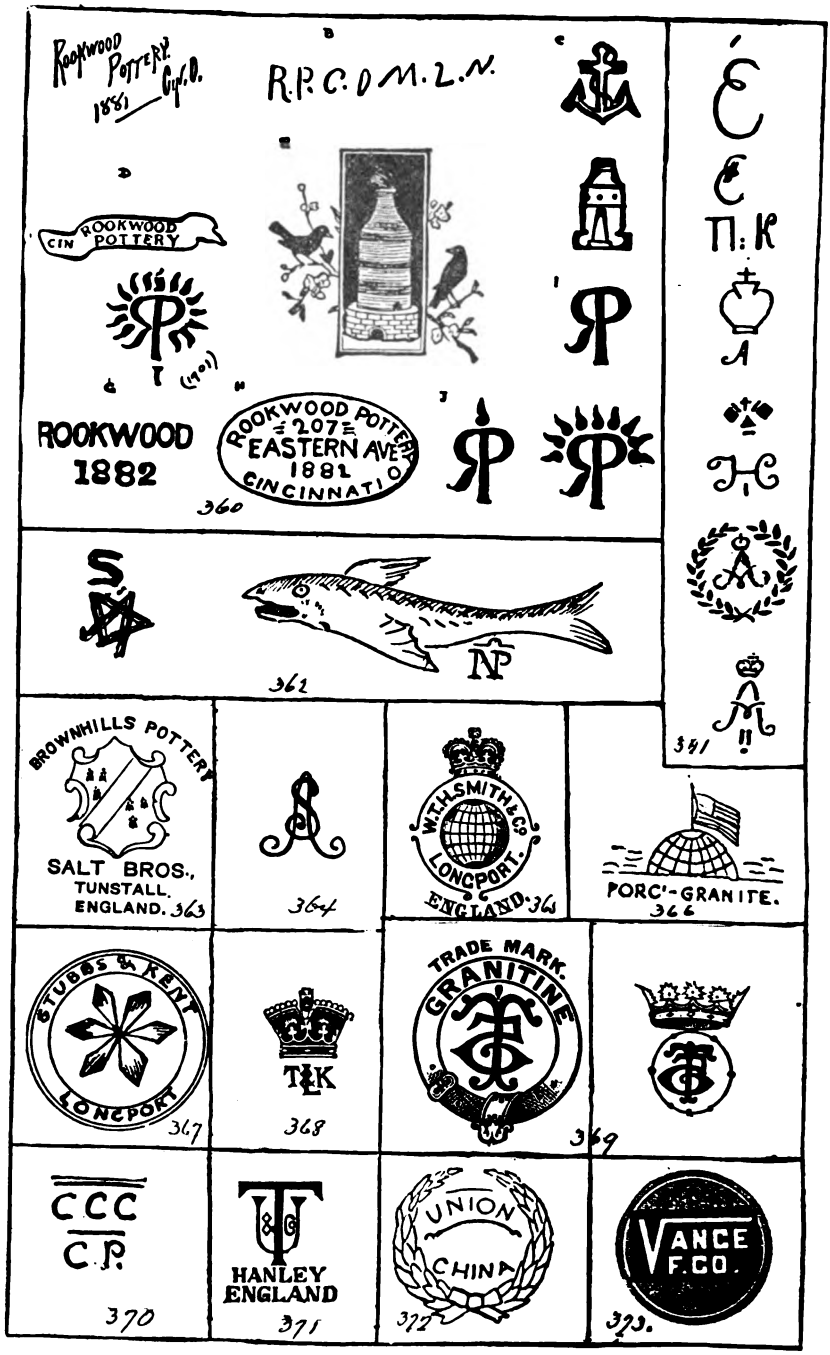
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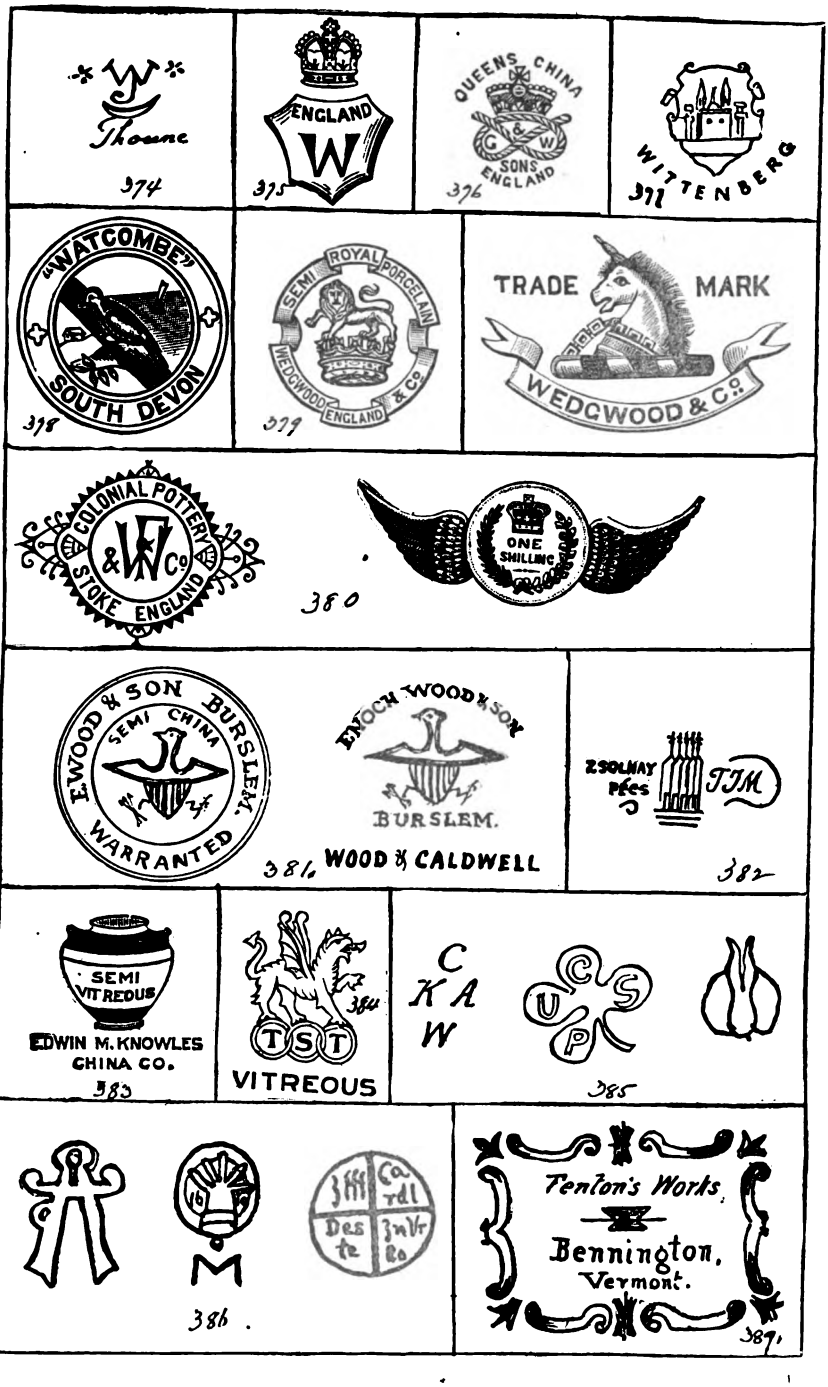
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